

No.

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THE
JOURNAL OF HEALTH,
AND
RECREATION.

Health—the poor man's riches, the rich man's bliss.

As much as in thee lies, live at heart's ease.

VOL. IV.]

PHILADELPHIA, SEPTEMBER, 1832.

[No. 1.]

MEDICAL GEOGRAPHY.

We will venture to say that there is no country in the world, a knowledge of the Medical Geography of which is so important as that of the United States of America;—and yet of no one is there such ignorance, in other countries, on the subject. To the European emigrant it is a question of momentous interest, for him to ascertain with tolerable accuracy, in what quarter of the Union he can best locate himself, with a due regard to the preservation of the health of himself and family, and at the same time to the furthering of his views of money making, by mechanical or commercial pursuits in the city, or, a more frequent and probable supposition, by farming in the country. But not alone to foreigners is this inquiry one of interest. To the native citizen it is of equal importance. By inclination more than necessity the inhabitants of these United States are roving, restless, and migrating. Ever intent on bettering their condition, they are constantly on the alert to move to a section of country reputed to have a more fertile and cheaper soil and a finer climate—though the latter is too often a mere secondary consideration. In these migrations, however, change is not sought for as a means of evading labour and toil, in the hopes of enjoying an El Dorado without any personal risk or exercise of ingenuity. On the contrary, the rovers are often tempted by a mere love of adventure, a restless desire of change for the sake of variety alone. Hardly is a person who has left Virginia well settled in Kentucky, before he is seized with a longing to go to Missouri or Alabama, and if he feels himself tolerably comfortable in his second move, he will, not unwillingly, attempt a settlement still further west and take a peep at the ‘Aberagoins’ as a member of the legislature (no matter of what State) once called the Aborigines; and perhaps join them in hunting and trapping one season and, fight them the next. There are sets, or currents we might call them, of emigration from

different quarters along the sea board in a westerly direction. The New Englander takes his course for Ohio and Illinois, or the Michigan Territory; the Virginian, who used to be content with moving to Kentucky, now makes it, half the time, a mere reconnoitering ground, from which he takes a fresh departure for Missouri, Alabama or Louisiana.

These are only some of the changes of place and climate sought after by our fellow citizens. Others more numerous but temporary, are of nearly annual occurrence to a large number of all classes. An inhabitant of a district on one of the head waters of the Alleghany River in the State of New York, will be seen in Louisville, or even New Orleans selling the timber, which, as a raft he had floated first into the Ohio and finally down the Mississippi: he making his way home as best he may. In former times this was an affair of infinite toil—now, thanks to steam-boating, he finds it an easy matter.

Merchants—store keepers travel from all parts of the Union to the Atlantic cities, Philadelphia, New York and Baltimore to purchase goods—going through, in the journey, as great a change of climate, as would the Italian travelling to Moscow, or the Spaniard to Denmark. We have seen one of these gentlemen from the Arkansas Territory making his investment of goods in Market street, with as quiet methodical and unpretending a manner as if he had just left his store, a few miles out of town. A person in London whose home was upwards of 1200 or 1500 miles distant, would be one of the lions of the day—no matter what his pursuits or modicum of intelligence: but here we are used to such things.

The meeting of the National Legislature or Congress, is another means by which persons, in leaving their homes, often undergo great changes in locality and climate. The representatives from Maine and New Hampshire are in a southern climate at Washington.—Those from Georgia and Louisiana may complain of the cutting easterly, and frozen air of the north in that city.

Conventions of a religious character in some one or other of the Eastern cities, bring persons together from remote and opposite quarters of the Union, and are the means of subjecting them to often trying changes and vicissitudes of climate.

Nor ought we to omit a notice of another not less interesting and beneficial annual convention of persons, young indeed, but ardent in the pursuit of a knowledge, which not solitary nor selfish in its application and enjoyment, is to be usefully applied to saving the lives and preserving the health of their fellow men. We of course allude to the medical students, who come on every winter to attend lectures, and study anatomy and practical surgery and medicine. We see them to the amount of many hundreds every year in Philadelphia—from all parts not only of the Union but of North America. It has fallen to our lot in one season to have under our own immediate charge a young gentleman from Nova Scotia and another from Trinidad di Cuba, while pursuing their medical studies in this city.

Another numerous class of rovers yet remain to be mentioned.

They are travellers for health and pleasure; and in some respects they are entitled to a more conspicuous notice and friendly advice than the others whom we have enumerated. Many of them are females—wives, sisters or daughters, who leave behind them the close and heated and too often unhealthy atmosphere of the Carolinas, Louisiana and Mississippi, to inhale a purer air and enjoy the scenery, and partake of the amusements of the North. Some hie them to the mountains and drink health from the famous springs of Virginia, and others hoping to make a league between fashion and health visit Saratoga and the Lakes—while a third set keep along the shore inhaling the fresh breeze from the Ocean and bathing in its briny waters. Many of these travellers discover after a time, that the change of place and scenes, the long, long distance from home, does not realise all their fervid hopes; and some are not a little chagrined to find that they may without due care, contract in Pennsylvania and in the fashionable tour through New York, fevers so near akin to those of their own part of the country as not to be distinguishable from them. Fever and ague and remittent bilious fever, are not the products of the soil south of the Potomac alone. Wherever flows a broad river, with its wide meadows and low grounds, or wherever sluggishly steal along streams through marshes and loam and clay, there may these diseases be looked for in the autumnal months by those who heedlessly expose themselves to the night air, and infringe on the rules of temperate living. Yet another evil awaits the traveller from the south when he reaches our north-eastern coast—if his lungs be weak, he must dread the eastern blast which brings with it catarrh, hæmoptysis or spitting of blood, and, more than all, fell consumption in its train.

But what more of Medical Geography we have to lay before our readers, and much remains, must be postponed for future numbers of our Journal. We have only been able, in fact desired little more on this occasion than to show how deep and wide the interest in the subject ought to be among the inhabitants of these United States.

TEMPERATURE OF THE INTERIOR OF THE EARTH.

The heat discovered at considerable depths from the surface of the earth, must have some other origin than the sun. The heat produced by solar rays only makes its way to a certain depth through the material of the earth, and escapes from the surface by radiation; and so nicely balanced are the quantities received and radiated, that at the end of the year no sensible trace remains of these calorific impressions.

The mean temperature of the year undergoes no permanent change, though it may oscillate from one year to another within certain narrow limits. "Below the surface the heat descends very slowly, and the diurnal and annual variations are only sensible at inconsiderable depths; at greater depths the temperature is nearly uniform, and equal to the mean temperature of the year at the surface."

Observations have been regularly made for a length of time, of the temperatures of spots at some distance below the surface of the earth. At Paris they have been continued uninterruptedly during the last fifty years in the caves under the Observatory. The thermometer is placed at the depth of nearly 31 yards, under the surface in a bed of fine sand—and during the last 33 years in which it has been observed by Bouvard, it has indicated no change of temperature, or at least its oscillations have not exceeded the 1-33 of a centesimal degree. It has been found that the constant temperature which it marks is 21-6 deg. Fahrenheit more than the mean temperature of Paris at the surface. The difference here is dependent necessarily on other causes than solar heat—and estimating successive increases at greater depths at the same rate, we should arrive at the temperature of boiling water at the depth of 2542 yards below Paris.

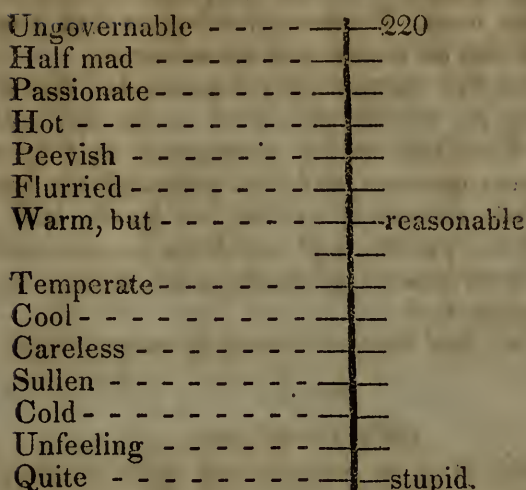
But the rate of augmentation of heat in the temperature of the earth, is not by any means determined in a positive manner. “With a view to the more accurate determination of this important element, M. Cordier himself, (Professor of Geology in Paris,) with a perfect knowledge of all the precautions necessary to be used, undertook to examine the temperature of several coal mines in France. At Carmeaux, the mean of his observations gave 21 yards as the depth corresponding to an increased temperature of 1° of Fahrenheit, at Littry 11 1-2 yards, and at Decise 9 yards, results far from presenting a satisfactory coincidence.” “The mean of a great number of observations made in the mines of Cornwall and Devonshire, by M. W. Fox, and published in the *Philosophical Transactions* of 1821, and 1822, gives 15 yards as the depth, corresponding to an increase of 1° Fahrenheit. In the coal mines of Brittany, the same mean depth is found to be 25 yards; at Bex, in Switzerland, 15 yards; in Saxony, 24 yards; at Guanaxato, in America, 16 yards. M. Cordier, considers that 15 yards may be provisionally assumed as the average depth to an increase of 1° Fahrenheit.”

DEATH'S FROM CHOLERA FOR THE LAST TEN YEARS IN PHILADELPHIA.

Years.	Under 10 years of age.				Over 10 years of age.				Total
1822	-	-	-	192	-	-	-	13	212
1823	-	-	-	252	-	-	-	13	265
1824	-	-	-	155	-	-	-	9	164
1825	-	-	-	197	-	-	-	12	209
1826	-	-	-	233	-	-	-	11	244
1827	-	-	-	229	-	-	-	10	239
1828	-	-	-	284	-	-	-	7	291
1829	-	-	-	239	-	-	-	18	257
1830	-	-	-	232	-	-	-	4	236
1831	-	-	-	303	-	-	-	17	320
				<hr/> 2323				<hr/> 114	<hr/> 2438

In the Reports of the Board of Health, from which the above statement is made, the disease in infants is usually designated by the term *Cholera Infantum*, that in adults, as *Cholera Morbus*.

MORAL THERMOMETER.



This very useful scale is earnestly recommended to all heads of families, to be hung up in a conspicuous part of the house. The use of it is to ascertain the degrees of restraint and improvement which have been effected in the human temperature, and its changes. Those who would derive full benefit from it, should imitate the diligence of the natural philosophers, who keep meteorological diaries, by entering in a journal every variation observed in their own tempers or that of their friends. They will thus be enabled at any time by looking back to former entries, to see what measure of improvement has been gained in a given period, as well as to discover, by comparing the entries in the moral with those in the meteorological journal (with which the newspapers from time to time favour us) whether that which is said to affect so powerfully the human temper, the state of the atmosphere, does indeed cause all the alterations we remark. Thus, for instance, when in excuse for a fit of passion in July, or of a peevishness in October, the heat or dulness of the weather is pleaded; if by referring to February, or to some bright cheerful day in April, an entry of the same kind is found, it may be very safely concluded, that the weather is not alone in the fault.

We recommend the moral thermometer from having known it to be used in numerous instances with great advantage. An individual whose temper always pointed to the degree of *sullen* in the morning when he met his family at the breakfast table, and on returning from a select party of his friends at night, rose to some one of the degrees above *hot*, was induced to investigate the cause of these *strange phenomena*, and arriving at the truth, was enabled to effect such a reformation in himself, that for many months on a stretch his temper and habits remained *temperate*, or rose only to the degree marked *warm but reasonable*. A gentleman who made use of the scale, finding by his diary, that while in the first hours of the day his temper was tolerable cool and even, it sunk after his meridian luncheon and cheerful glass to dull, and after a late dinner got so low as quite stupid, effected so complete a change in his

disposition, by an alteration of his food, that he assured the writer a variation in the moral Thermometer higher than warm or lower than cool was to him an uncommon occurrence.

The inventor of the thermometer is persuaded that if ladies and gentlemen, young as well as old, were to use the instrument according to the directions which accompany it, they would find their own happiness increase, and their acquaintance more desirous at all times of their company; neither has he the least doubt, but husbands and wives, parents and children, masters and servants, would find their lives become gradually much more easy and happy by a proper attention to it.

N. B. The scale had better be hung up out of reach.

LIFE IN RUSSIA.

We have culled from an entertaining work, descriptive of the manners and customs of the Russians, the following articles, which will, as now arranged, possess interest that the reader would not be sensible of in perusing the book itself.

A Peasant's House.—The whole premises consist, generally, of a court-yard with a covered roof, of an enclosure for the cattle, another for the hay, an ice cellar for the milk and meat in summer, a store-house for oats, rye, and buckwheat, and a covered porch with a door, to intercept the exit of heat from the eezba in winter; lastly, the eezba, that part of the house inhabited by the peasant and his family, and heated with a large brick oven-stove. In Byalo-Russia, stoves are not so much used as raised hearths, on which fires are kindled.

Landlord and Tenant.—The peasants in Russia were formerly, it is known to our readers, slaves of the soil, as perhaps the greater number of them are at this day. The lower order of tenants are often in nearly as debased a condition. According to the written law of Russia, the peasants can only be obliged by their masters to work for them three days in each week; but in practice this regulation is null and void. The peasants are *actually* obliged to do all their masters' field work before they can touch their own. In case of refusal, their masters can find means to punish them as they think proper.

An Execution.—What is called an *execuzion* in the Polish governments is a quartering upon a peasant some of the household vassals, usually the greatest blackguards, who riot, eat and drink in the house, till the peasant pays his dues, or complies with his landlord's demands, as of fowls, eggs and butter, if he wants to give a feast. Sometimes these executions are inflicted for not working well, for rudeness to the Jew-farmers, and for various other causes. The preparations for a ball, for example, make the villages around the Ghospodeen or country gentleman who is owner of the district, scenes of rapine and misery. The hungry vassals of the household act like real marauders. They search for fowls in the chests, butter amongst the linen, and eggs in the bosoms of the peasants, poking

into every hole and corner, and insulting in every possible way the poor villagers, both males and females.

Apprentices to Mechanics.—The Russians and Polish gentry are in the practice of sending some of the young boys and girls of their household as apprentices to different trades in the metropolitan cities: indeed almost all the apprentices of the different artisans there are composed of this class.

Siesta.—The *siesta*, or after dinner nap, is not confined to southern climates. In the heat of summer in Russia, not only elderly people in good circumstances, but almost the whole body of the people, take a two hours' nap, usually from one to three, P. M.; but then, working people, in summer, are in the habit of rising at three or four o'clock in the morning. Even in winter the custom of sleeping after dinner is by no means uncommon.

Drinks.—*Quass* is a sour, fermented liquor, made from rye-malt, and is the usual drink of the common people in Russia. It is represented as a very refreshing drink in the heats of summer.

A much more pernicious, and a too common drink, is *vodky*, a sort of whiskey, made from malt and rye flour.

No one has lived in Russia without appreciating the benefits of the Russian tea-urn, or *samovar*, which is not unlike the old English tea-urns in shape, but is heated with charcoal. When the teapot is placed on the top of the *samovar*, the strength of the tea is drawn off sooner and better than by any similar process with which we are familiar. *Brick Tea*, the commonest and cheapest sort of tea, used mostly in Siberia, is sold in pieces of a form similar to bricks. It is sometimes made a substitute for money; goods being valued by the number of these pieces of tea.

A Country Town.—All that I saw, from one end of the town to the other, as I walked along the streets, was ragged boys, hungry dogs, horned cattle and fowls, cheek by jowl, grubbing amongst the dirt in the middle of the street, old women with their arms akimbo standing at the gates of log-houses talking with their neighbors, grown-up men standing in crowds before the cabarets or petty taverns where the old men were seated, and youths passing to and fro before windows, from which now and then some sweet little visages would peep out. In some places, the mourners' songs were heard; and to complete the picture, in two places, *peaceable* cottagers were pulling each other by the hair, in a circle of good neighbors and friends, while some *respected* fathers of families, inebriated with the gifts of hyperborean Bacchus, joined arm in arm some dozens of boys, and were singing a dancing song.

The town was nothing but a large, square space of ground, surrounded with a broken railing; three-fourths of the enclosed ground was occupied as pasture. A broad street, or properly speaking, the post road, runs through the middle of this enclosure. On both sides of this road, across the gutters, were built small wooden houses or huts. On the right and left were some lanes, with huts half sunk in the ground, and large empty spaces of land inclosed with broken rails and palings. In the centre of the town was a square, in which

was erected a brick church, and a half-reared structure of the same materials, which had at one time been destined for the government building. On paper this town occupies a great deal of space, and all the streets marked out in nature by the digging away of earth, and the remains of gutters, formed a beautiful perspective on the plan. It was only a pity that heaps of dung and rubbish, thrown together confusedly, occupied the place of the greater part of the houses finely planned by the government architects.

Accommodations on the Road.—There are no bed rooms in the houses upon the road, but if the traveller should have a bed or pillow with him, he gets it spread out at night on the floor of the sitting room; if he have no bed, he can generally find cushions, or sofa, or pieces of felt, to stretch himself out upon for the night, at least in the post houses.

Moscow Hospitality.—The most prominent feature of Moscow is hospitality, or the propensity for keeping open table. One may affirm without hesitation, that more is eaten and drank in Moscow, in one year, than in the whole of Italy in twice the time. To make their guests eat and drink to excess, is esteemed in Moscow the first characteristic of a good *accueil*. To guzzle and swill to a *ne plus ultra* is a sort of pleasure, which even well bred people do not deny themselves.

INOCULATION FOR THE SMALL-POX IN DEVON.*

It will hardly be credited that the great bulk of medical practitioners in the south of Devon, (Eng.) are constantly in the habit of inoculating for the small-pox when the natural form of that disease makes its appearance; but although such an astounding assertion may goad many to a disbelief of the fact, it is not the less true. Inoculation is undoubtedly beneficial to the few, but it proves fearfully dangerous to the community at large. This opinion is supported by the best and most learned men in the profession, by all our public medical bodies, and by the recorded decisions of the legislature of this and of other countries; which decisions have been arrived at after the most patient and impartial investigation of the results of this practice.

Small-pox, before the introduction of inoculation, was treated by the hot system, when one in four or five died. After this period, the cooling treatment was adopted, when one only in seven or eight fell victims to the disease. Inoculation was introduced in 1721, and was coming into general practice in 1732. In the forty-two years which followed the latter period, notwithstanding the more successful treatment of the disease, and the practice of inoculation, the number of deaths was increased by the enormous proportion of nineteen on every hundred, as compared with the forty-two years which immediately preceded 1732; this is proved by the table constructed by Baron Dimsdale, by the bills of mortality, and by the evidence given before a Committee of the House of Com-

*Gazette of Health.

mons in 1802. One of the witnesses stated that, in the concluding thirty years of the last century, as compared with the first thirty years, the mortality had increased from seventy in each 1,000 to ninety-five.

Deaths in every 1,000 from small-pox from 1689 to 1731	- - -	72
Increased mortality in every 1,000 caused by the hot treatment, taken at one-third	- - - - -	24

48

Deaths in every 1,000 from small-pox, from 1732 to 1772,
when the cooling treatment was generally adopted - - - 89

This gives an increase of forty-one on every thousand, but whether the increase be forty-one or one, the conclusion must be the same—namely, that the practice is injurious. In 1763, the French Government issued a decree, prohibiting inoculation for the small-pox in Paris, under a conviction that it was a means of increasing the mortality. The Spanish Government arrived at the same conclusion respecting this practice in their Asiatic and South-American settlements. And, lastly, Dr. Crighton informs us that during the extensive employment of inoculation in Russia, “so great was the mortality caught by infection, that every seventh child died of the disease.” Thirty years since, when the population of the United Kingdom was about 14,000,000, forty thousand died annually from small-pox. Taking the population now at 24,000,000, the deaths would have been 70,000 annually. But that inestimable boon, vaccination, was introduced at the commencement of the present century, which soon armed us against the horrors of this pestilence. The following calculations are taken from the best authorities.—One in five or six hundred of the inoculated dies; one in seventy-five from small-pox taken a second time; one in 3,000 of perfectly vaccinated takes small-pox, and one case in 336 of those attacked terminates fatally; so that if all the 24,000,000 were perfectly vaccinated, 8,000 cases of small-pox would take place in this generation, and twenty-three would die—instead of 70,000 annually. If this calculation be a little exaggerated, the difference is so great that the inoculators are at perfect liberty to make what additions they please to it.

June, 1832.

WESTON GOSS,
Surgeon, Dawlish.

BEARDS, MUSTACHIOS, AND WHISKERS.

“HENRY VIII.” says Puttenham, in his rare work, entitled *The Art of Poesie*, “caused his own hair, and all his courtiers, to be polled, and his beard to be cut short. Before that time, it was thought to be more decent, both for old men and young, to be all shaven, and wear long hair, either round or square. Now, again, at this time, (reign of Elizabeth,) the young gentlemen of the Court have taken up the long hair, trailing on their shoulders, and think this more decent; for what respect I would be glad to know.”

In the olden time, when ladies were accustomed to behold their

lovers with beards and mustachios, the sight of a smoothly shaved chin excited feelings of horror and aversion, or of disgust—as much, indeed, as in this less heroic age, would a gallant, whose luxuriant beard should “stream like a meteor to the troubled air.” Although, when we behold the enormous whiskers, either false or natural, which adorn the faces of our exquisites, we do not believe we should risk much, were we to prophecy that the time is near at hand when the flowing beard shall be as *fashionable* as in the days of the Druids.

When Louis VII. of France, in obedience to the injunctions of consort, found him, in this usual appearance, at first very ridiculous, his bishops, cropped his hair, and shaved his beard, Eleanor, his lous, and soon very contemptible. The poor shaved and shorn king obtained a divorce. The queen then married the count of Anjou, afterwards Henry II. of England. She had, for her marriage portion, the rich provinces of Poitou and Guyenne; and this gave origin to the wars which, for three hundred years, ravaged France, and cost the French three millions of men, all which would, probably, never have occurred, had Louis not been so rash as to crop his head, and shave his beard—by which means he became so disgusting in the eyes of Eleanor. We cannot, certainly, sympathise very deeply with the feelings of her majesty, though at Constantinople, even at the present day, she might not have been considered quite unreasonable.

There must be something more powerful in beards and mustachios than we secluded bookmen are quite aware of; for, when they were in fashion, with what enthusiasm were they not contemplated! When mustachios were in general use, an author, in his *Elements of Education*, published in 1640, thinks that they contributed to make men valorous. He says, “I have a favourable opinion of that young gentleman, who is curious in fine mustachios. The time he employs in adjusting, dressing, and curling them, is no lost time; for, the more he contemplates his mustachios, the more his mind will cherish, and be animated by, masculine and courageous notions.” Now this we might have very innocently set down as a very excellent satire on the follies of the dandies of two hundred years ago, had we not met with a writer of our own day, who very gravely enters into a laboured argument, to prove that the degeneracy, real or presumed, of our modern gentlemen, is owing chiefly, if not entirely, to the abandonment of “the flowing beard and fierce moustache.” “On perusing the history of the people of different nations that suffer their beards to grow, and of those who are in the habit of shaving it off, we should be induced to believe,” remarks this learned advocate of beards, “that the muscular power is in some degree connected with it, and, that part of the power is in some measure lost, by the habit of shaving. Every body knows how very powerful the ancients were—how very strong were the nations that wore long beards.” We shall say nothing of this author’s well authenticated facts, and very conclusive reasoning; we have some prejudices against beards and mustachios, and differ

from him in opinion as to the causes which produce a difference in the muscular strength and energies of individuals, and of races of men.

The best reason that could be given for wearing the longest and largest beard of any Englishman, was that of a worthy clergyman in Elizabeth's reign, viz:—"that no act of his life might be unworthy of the gravity of his appearance."

The grandfather of Mrs. Thomas, the Corinna of Cromwell, the literary friend of Pope, by her account, "was very nice in the mode of that age, his valet being some hours every morning in *starching* his beard, and *curling* his whiskers—during which time he was always read to." Taylor, the water poet, humorously describes the great variety of beards in his time. The beard, says Granger, dwindled gradually under the two Charles' till it was reduced to whiskers, and became extinct in the reign of James II., as if its fatality had been connected with that of the house of Stuart.

TOBACCO.

It is somewhat remarkable that the use of tobacco should have become so general throughout every portion of the civilized world, and at so early a period after the plant became known in Europe, especially when we recollect that its use was at first denounced by Kings, Emperors and Councils, and forbidden by the bulls of two successive Popes.

The first account we have of the tobacco is that of Romanus Pane, a Spanish monk, whom Columbus, in his second departure from America, had left in that country, and who became acquainted with the plant in St. Domingo. This account was published in 1496. It does not appear, however, that the use of tobacco was commenced in Europe until after the middle of the 16th Century, when Jean Nicot, envoy from France at the Court of Portugal transmitted the seeds of the tobacco plant to Queen Catherine de Medicis; from which circumstance it has obtained its botanical name of *Nicotiana*. In 1604, James the first of England endeavoured by means of heavy imposts, to abolish the use of tobacco in his dominions; very properly considering it to be "a most noxious and filthy weed." As early as 1610, the smoking of tobacco was known at Constantinople. To render the custom ridiculous, a Turk, who had been found smoking, was conducted about the streets with a pipe passed through his nose. For a long time after this the Turks purchased tobacco, and of the worst quality from the English. It was long before they learned to cultivate the plant for themselves. In 1619, King James the first of England wrote his celebrated "miscoapno" against the use of tobacco, and ordered that no planter in Virginia should cultivate more than one hundred pounds per annum. Five years subsequently, Pope Urban VIII. published a bull of excommunication against all who should take snuff in church, because then already some Spanish ecclesiastics used it even during the celebration of mass. In 1634 smok-

ing was forbidden in Russia under the penalty of having the nose cut off. In 1653 some of the inhabitants of the Canton of Apenzell in Switzerland began to indulge in the habit of smoking. At first the children ran after them in the streets. The Council likewise cited the smokers before them, and punished them—they also commanded the innkeepers to inform against all such as should smoke in their houses. Towards the middle of the seventeenth Century, the police regulation of the Canton of Berne was made, which was divided according to the ten commandments. The prohibition to smoke tobacco was introduced immediately after the seventh commandment. The prohibition was renewed fourteen years subsequently, and a tribunal particularly instituted to put it in execution, the "*Chambre du tabac*," which was continued until about the middle of the eighteenth Century. In 1670 and the two following years, smoking of tobacco was punished in the Canton of Glarus by a pecuniary fine for every offence of one crown Swiss currency. In 1690, Pope Innocent XII, excommunicated all who should be guilty of using snuff or tobacco in the church of St. Peter at Rome. In 1724, however, the bull of excommunication was revoked by Benedict XIV., who had himself acquired the habit of taking snuff. In 1719, the senate of Strasburgh prohibited entirely the culture of tobacco, from an apprehension that it would prove injurious by diminishing the growing of corn. Notwithstanding all this formidable array of church and state against the use of tobacco—so essential an article of luxury was it deemed towards the latter part of the eighteenth century, that the revenue derived from the article of tobacco alone amounted in Portugal, Spain, Denmark and France, to upwards of ten millions of Rix dollars annually.

It is not to be supposed, however, that the use of tobacco had not its defenders; its eulogy was early pronounced by men of very considerable eminence. To the Hollander it was recommended as a corrective of the bad effects upon the body of a damp and foggy atmosphere—to the melancholy as an exciter of the nerves—to the sanguine as a preventive of apoplexy—to the asthmatic as a softener of phlegm—to the inhabitants of cold climates as a warmer of the blood, and to the inhabitant of hot climates as a sure preventive against the plague and all contagious diseases. It was declared to be an excellent help to study by clearing the brain, and like wine to enliven the imagination of the poet. In fact, to believe all that has been said of tobacco, its discovery was to be viewed as one of the greatest blessings bestowed on man.

Erschine's famous lines in praise of tobacco smoking are well known to the reader, as well as Browne's "pipe of tobacco." Most of its supposed virtues are thus summed up by Howell in his letters;* "If moderately, and seasonably taken (as I find you always do) it is good for many things; it helps digestion taken a while after meat; it makes one void rheum, expels wind, and keeps the body open: a

* Correspondence of James Howell, Esq. 1646.

leaf or two being steeped over night in a little white wine, is a vomit that never fails in its operation: it is a good companion to one that converseth with dead men, for if one hath been poring long upon a book, or is toiled with the pen, and stupified with study, it quickeneth him, and dispels those clouds that usually overset the brain. The smoke of it is one of the wholesomest scents that is, against all contagious airs, for it overmasters all other smells. Now to descend from the substance of the smoke to the ashes, it is well known that the medical virtues thereof are very many; but they are so common that I will spare the insertion of them here."

Such was the esteem in which the virtues of tobacco were once held by men of sense—what then must have been the estimate of them by the vulgar. Happy would it be for our own countrymen, who from the smallest even to the largest—from the humblest even to the greatest, are prone to indulge in the chewing or smoking or snuffing of tobacco—did the plant possess a tythe of the virtues that have been ascribed to it—disease or dullness they would never have known, and we are persuaded no surly critic would ever have dared to pronounce a good poet, a chaste orator, or a correct historian an uncommon thing in America.

EXCUSES FOR DRUNKENNESS.

We have long had upon our table an essay bearing the above title, and published towards the close of the last Century. It is full of humor and most biting satire. It was our intention to present to our readers some extracts from it before now; but in consequence of other subjects pressing in upon us of more immediate interest it has been laid aside. Our attention has been recalled to it, however, in consequence of finding it with some slight alterations transferred to a late English publication where it appears as an original article.

Against indulgence in wine, says the writer, there are, perhaps, no arguments so strong as the arguments in its favour contained in the songs of the Bacchanalians. We are dissuaded from it by the moralist, who represents it as the fascination of a Siren, which wins us over to vice by subduing our reason, and we are invited to it by the song of the Bacchanalian, as to something that will soothe our cares, inspire us with joys vehement if not permanent; and banish from our minds the evils and troubles of life. The former seems to think, that the vice of drunkenness has so many allurements, as to require his cautions against our being seduced into it; and the latter that it has so few, as to stand in need of his strongest recommendations in its favour.

"When filled with wine the poor man forgets his poverty," says Hafiz, or some other commender of wine,—and a more modern poet praises it as "unloosing the stammering tongue." In argument these words will go no farther than to prove, that he who is poor, may, by drinking, become in imagination rich, and that he who stammers, may, by the same expedient, find the temporary use

of his tongue. He that is not a beggar then will recollect, that he stands in no need of such a receipt, and he who does not stammer will think that remedy unnecessary which was intended to cure a disease with which he is not afflicted. I can inform them too, upon pretty good authority, that the remedy in both cases is rather a doubtful one—that it has in fact, made many a rich man poor, and deprived many an orator of his ready tongue.

Wine is further recommended to us as the inspirer of courage—"it thrusts the unarmed man to battle." That it has this effect is, I believe, very true, and so much the worse for the unarmed man. The testimony of a black eye, or a bloody nose, the frequent off-spring of wine drinking, are striking proofs, that to go unarmed to battle is no great mark of wisdom nor a desirable test of courage.

Wine, however, it is said inspires confidence, and wit, and eloquence; that is, it changes modesty to impudence, ingrafts the art of joking upon dullness, and makes a long winded story teller of a fool. While these qualifications are worth obtaining, I would have sobriety considered as a vulgarity, if not stigmatised as something worse; but when that ceases to be the case, I hope the liberal spirit of tolerating principles, which is so much the fashion of the age, will allow a moderate man, without infamy, to say, "I would rather not get drunk to-day." Indeed, I have reason to believe this might be brought to pass, having seen one instance of a gentleman, with politeness, excused from taking wine, upon his producing the testimony of two experienced physicians, that he was laboring under a violent fever; and another, upon a certificate, properly authenticated, from the church wardens of the parish being presented, to show that he had lately lost his mother.

Now to turn the tables upon the wine praising poets, I could adduce without much difficulty the written experience of certain observing individuals, who have passed among their neighbours as men of sound judgments, to prove that wine, in the language of one of them, "often turns the good natured man into an idiot, and the choleric man into an assassin;" that "it gives bitterness to resentment, makes vanity insupportable, and displays every little spot of the soul in its utmost deformity."

But there is another set of very weighty arguments or excuses call them which you will, for indulgence in wine. Certain great, and wise and learned men, who have been praised and courted and admired have made free use of it. It is true that those who are not thoroughly satisfied with becoming drunkards, unless they can find precedents for their folly, may drink on under the sanction and authority of Alcæus, Aristophanes and Ennius. Dullness may still plead a right to this indulgence, because the unsteady principles of heathen morality did not stigmatize it in Cato. I could produce examples enough, under which all musicians, poets, satirists, wits and orators may shelter themselves; and I will undertake to furnish the same kind of license for the barbers, dentists, carpenters, and glaziers, or any other order of men who will depute an embassy to call on me:—I shall only request in return, that they will allow me

a trifling consideration, in their respective branches. I shall stipulate for a wig, a triple bob major, because Demosthenes shaved his head; and to have my teeth drawn because that orator had an impediment in his speech; I must have a wooden leg, most certainly, because Agesilaus was lame; and a pair of glass eyes because Homer was blind. I shall by these means be supplied with as rational a set of apologies for my deformities, as they will for their intemperance; and in process of time, I have no doubt, but it will be considered as highly ornamental to be bald pated, stuttering, limping and blear eyed, as it will be to be addicted to the use of wine.

PHYSIOGNOMY.

There is hardly any subject of such frequent speculation and on which we are so prone to form an opinion, as the expression of countenance of people whom we see for the first time. Every body, almost in despite of himself, is a physiognomist; that, is he infers from the features of the face the intellect and disposition, and not unfrequently even the character of its owner. Like most judgments formed hastily and with insufficient data, there are many errors in the every day physiognomical conclusions. Not that the subject properly considered, is necessarily or must commonly be a source of error: but it is studied in a wrong light, by our attaching importance to what is really extrinsic, and insisting on there being more revealed to us than the testimony of the case warrants; and finally by our overlooking parts of evidence which bear directly on it.

Physiognomy, as we have elsewhere said, "is essentially the study of all those parts, which by their configuration and motion, are indicative of physical and moral powers and properties; and which give premonition of the varying states of feeling, either in bodily pain or mental anxiety." There are, in fact, two divisions of physiognomy: the one consisting in a study of the configuration and prominences of the superficies of the several parts of the body, especially of its hard or bony part; the other in that of the motions of the soft parts, especially of the muscles. The first constitutes, mainly, national physiognomy, or that of the different races of mankind; characterised as they are by the different size and form of the skull, and varying prominence of the bones of the cheek, nose and chin; straitness or curve of the bones of the leg; length and fulness of those of the foot especially the heel. The second, or individual physiognomy, depends on the movements more or less rapid, and in quick succession or alternation of the muscles or fleshy parts of the face and limbs. Attitudes and gesture are in fact as much within the domain of physiognomy as the play of the features of the face, and are to the full as significant of the temper and disposition of the individual as are these latter.

It is the second of these divisions alone, that is to engage our attention when we study physiognomy in the common acceptation

of the term: for if we except the configuration of the skull or bones of the head, all other differences of bony structure have absolutely nothing to do with the intellect and disposition. On the score of beauty, we must admit the superiority of certain forms of face over others: but whether a nose be long, or flat; cheek bones prominent and square, or rounded, a chin pointed, or short and abrupt, gives us no intimation of the good sense or good temper of their possessor.

The real instruments of expression, and the motions of which are evidences of both mental and bodily state of well being or of suffering, are the muscles or bands of flesh going from one bone to be inserted into another. When they contract under the influence of volition or a stimulus conveyed to them from the brain, by means of those white cords called nerves, they give rise to the flexion and extension of the limbs and their more compound movements in attitudes, gestures, various modes of progression; and also to the play of expression of the features of the face, more especially about the mouth, nose and eyes. Proposing to treat hereafter of attitudes and gesture, we shall content ourselves for the present with pointing out the causes of the varied expressions of countenance, and showing how far they are to be considered as constituting a system of rational physiognomy.

We shall begin by apprising our readers unlearned in this matter, as well as ignorant of the structure of the human frame, that the instruments of facial expression are the same in number and office in every individual; that is to say that all have the same muscles and these in the same course and direction, for giving motion to the mouth, nostrils and eyes. Smiling, frowning, complacency, disdain, are each expressed in all persons by the same muscles contracting in the same direction.

The attention of our readers may now, for the better understanding of our remarks, be directed to the plate accompanying this article. It is not, we can assure those of our fair friends who might otherwise regard it with fear and mistrust, a face of a New Zealander tattooed nor of an Indian scalped: but simply a profile view of the head, face and neck, from which the skin and subjacent fatty matter have been removed, leaving the muscles in their natural direction and with their usual attachments at both ends. These muscles are, as already observed, found in every face—they are in that of fair Lesbia represented in the engraving opposite; though in this case covered with soft tissue which gives fullness and roundness to the face, and with skin which completes the outline of the features. Still the motion and play of these features is by means of the contraction of the muscles. The ends of these fleshy bands have, we see, a fixed insertion in bones, on one side; and, on the other, they are lost in the angle of the mouth, or are blended with the substance of the lips or nostrils. The obvious effect of their contraction or shortening, must of course be an approximation of the moveable end, or of the yielding part, in which it is inserted, to the fixed end or that on the bone.



Mr. J. Reynolds Engr.

J. Cheney Sc.

LESBIA.

Published by S. C. Atkinson.

If the reader will look at the profile view of the muscles of the face, he will readily understand how they become organs of expression, when they receive their bidding from the brain, during the active states of the mind. It must be remembered that there are two sets of these muscles; one for each side of the face, except the circular muscle of the mouth common to both sides. We have not introduced their names, not wishing to fatigue the memory with anatomical terms. One can easily understand from our description with sufficient minuteness the office of each. Thus, in the upper part of the profile, that corresponding to the forehead and covering it is a large muscle. By its contraction the brow is raised and the forehead wrinkled. In some persons the action of this muscle is so strong as to move the skin and the hair of the head backwards and forwards, and even to throw off the hat.



On the arch of the orbit of the eye and in the thickness as it were of the eyebrow, is a muscle below the one just mentioned. It is attached, on one end, to the ridge of bone just above the eye brow; and on the other to the muscle of the forehead and to that surrounding the eye and making up part of the eyelids. This is the *corrugator* or *knitter of the eye-brows*, and gives when it contracts the expression of frowning or scowling, by drawing downwards and inwards the eye-brows.

The circular muscle of the eye constituting part of the eyelids, serves by its contraction to close the eye, chiefly by shutting the upper eyelid. During this time it also depresses the eye-brow.

The muscles of the face proper, may be divided into two classes: the one to raise the nostril and upper lip and to draw the mouth upwards and backwards; the other to depress the nostril and the lower lip and to draw the mouth downwards and backwards.

The first of the superior set of muscles of the face, is seen passing from the upper part of the bone near the tendon at the inner angle of the eye, down over the side of the nose bordering on the cheek, and is inserted, one band into the nostril, and another into the upper lip. Its upper extremity being fixed, it must when it contracts raise the outer cartilage or wing of the nostril and the upper lip.

The next, to the outside, and a little lower is the elevator of the upper lip, in which one end terminates, whilst the other is attached to the cheek bone at the lower part of the orbicular muscle of the eye with the fibres of which it seems in the plate to be blended.

Nearly in the middle of each side of the face are three muscles, rising from the cheek bone and inserted into the angle of the mouth, which they raise and draw outward. They are of course the chief instruments in smiling, and laughing: only two are exhibited in the plate.

There is a large muscle below these, the lines of which are nearly horizontal, which constitutes the chief one of the cheek and which is seen greatly dilated in blowing the horn or trumpet. Its use is to force the air out of the mouth by contracting its cavity, to draw the angle of the mouth backwards, and in mastication to press the food within the line of the teeth.

But the chief muscle for mastication is external to this, passing from the arch of the cheek bone to the outer angle of the lower jaw. It is very plainly felt and seen in the act of mastication. This has little or nothing to do with expression.

The second set of muscles more directly concerned in expression and in a measure antagonist to those on the upper part of the face, are, the depressor of the outer cartilage of the nostrils, not visible in the profile view, the depressor of the angle of the mouth readily seen going from this part to the lower jaws. Its name is indicative of its action, which is also expressive of grief. It is the direct antagonist of the elevator of the angle of the mouth with the fibres of which it seems to be blended.

Adjoining this is the depressor of the lower lip, nearly square and attached below to the lower jaw and above to the lower lip.

Between this last muscle and its fellow on the opposite side, is a small one, the elevator of the chin giving to this latter when the muscle is in action a marked prominence.

An important muscle of expression is the circular one or orbicular of the mouth—it constitutes the thickness of the lips, and serves when contracted to fix the other muscles of the face, the ends of which, such as the elevators and depressors of the lips and angle of the mouth, and thus give an air of repose to the features. Its action is still further evident on playing the flute, in sucking, masticating, &c.

We have not spoken yet of a large muscle on the side of the head, spreading in a fan shape from the upper part of the side of the head to the arch of the cheek bone; and in breadth from the orbicular of the eye to the ear. All of it is not seen here, since it passes under the arch just mentioned, and is attached finally to the jaw bone, which it moves in mastication, as any one may be sensible of by putting his fingers over the upper part of the muscle in the region of the temples, during this act.

Of the muscles of the neck exhibited in the engraving before us, it will be sufficient to mention two: the first is that long and broad one attached, at one end to the large prominence behind the ear, and at the other to the collar bone: it serves to draw the head downwards and to one side; and when, as sometimes happens, it is permanently contracted, it gives rise to what is called stiff-neck.—The second muscle, part only of which is seen in the engraving is single, but composed of two symmetrical parts, one on each side the line of the back of the neck. It is attached above to the back and prominent part of the skull, and to the prominences of the upper part of the back bone, and below to the ridge of the shoulder blade and part of the collar bone. It serves to give that graceful roundness to the neck and shoulder which is so much admired. It is a muscle also of expression, since it serves to draw back the shoulders and to slightly move them: If the shoulders be fixed it has the power of inclining the head to one side.

Greater space being taken up with the above descriptions than we had at first anticipated, compels us, however reluctantly, to postpone their application to the various purposes of physiognomical study, to our next number. We propose then showing how much a knowledge of the subject concerns, not merely the speculative observer of other people's manner and expression, but also the artist, whether painter or mimic, and the physician and teacher. In the mean time we would recommend to our readers just to try the physiognomical impression produced by the exercise of the several muscles drawn and described in this article; as in the raising of the eye-brows and wrinkling of the forehead, an approximation of the eye-brows when closely knitted, an elevation of the nostril and upper lip, and of the angle of the mouth, a depression of this angle and also the various motions of the eye by means of its own muscles which are deep seated and not seen in the present drawing. It will be discovered that there are regular instruments of expression for the human face, which act in a determinate manner and not by chance; nor do they vary according to the particular fashion of an actor on the stage, or of a painter in making a portrait. We have at times strange grimaces exhibited by these artists, under the name of representations of passions. We counsel such to study the details set forth in this article, and the varied applications of them which we shall make in our next to the purposes of art and taste—painting, sculpture, dramatic and descriptive poetry.

JOURNAL OF HEALTH AND RECREATION.

PHILADELPHIA, SEPTEMBER, 1832.

So close are the intimacy and relationship between *Health* and *Recreation*, that in adding the latter to the title of our Journal, we but announce more clearly an union which we have always admitted to exist, and which is essentially demanded for the full enjoyment of either. Labour of mind and body—exercise of each and every organ and faculty of our nature is the main condition for the possession of full health. Of scarcely less importance is relaxation in due season—refreshment of the powers of life by pleasing impressions on the senses, an appeal to the gentler emotions, range given to the imagination, in fine the mind just conscious that it is not entirely at rest.

It is far from our intention, however, to abandon the ground which we have for some time occupied, and as we hope not disadvantageously to the public. *Hygiene* in all its multifarious subdivisions and varieties will still be our chief theme. Like morals and religion it is inexhaustible: like them indeed its leading truths ought to be familiar to every body; and yet there is no one individual whose attention is not required to be frequently directed to them, and their importance enforced by various illustrations and remarks. We shall not play the part of schoolmen or pedagogues by attempting to measure out the daily task of intellectual exertion, any more than we would pretend to lay down the kind and degree of bodily labour which each man may find necessary in his vocation. But we do propose to show by what means each of the faculties of our mind, those “high capacious powers” shall be ministered to, with a due regard to their separate specific wants, as well as to their combined operation. So far from curtailing the pleasures of life it will be our object to extend and prolong them, by teaching how the vigour of body and freshness and purity of mind are best preserved, and impart reciprocally sympathetic aid. Curiosity, that ever active principle in our nature, must be gratified by explanations of phenomena of daily occurrence, and by narratives of remarkable events and novel incidents. To do this we have at hand abundant

means in popular science and philosophy, travels, history and biography, and, in fine, all the accidents of genius. We may not at the moment be successful in fully explaining our plan, nor do we mean to assert that a fair example is presented in the present number of our work, but we believe that we may refer to it as conveying a tolerably good idea of what our intentions are for the future.

The article on *Medical Geography* in our present number is purely, as it professes to be, an introduction to the subject. Before describing some of the regions of the old world, remarkable for the peculiarities of climate growing out of soil and the course of great rivers, we had desired to give some notices on this subject, of our own continent. Happily for the execution of our plan, we are enabled to introduce to the notice of our readers an essay from the pen of Dr. Drake, of Cincinnati, on the climate of the Valley of the Mississippi. It will be a source of additional gratification to us, that we shall at the same time give a *continental* circulation to this article which originally appeared in the "Western Journal of the Medical and Physical Sciences" for July last, edited by Drs. Drake and Finley. The first part of this valuable contribution to American Medical Geography, shall appear in our next number.

Thaddeus Bulgarin, the author of the work *Ivan Vejeeghen or Life in Russia*, from which and the notes of the translator we have framed an article for our present number, is at present the most popular of all the living writers of Russia, with perhaps the exception of Pushkin. He is a Pole by birth. His father and many of his relatives took an active part in that momentous but unavailing struggle, in which Kosciusko fought and bled. Family affairs called the mother of young Bulgarin to St. Petersburg, and through her application her son was admitted into the Military College of Cadets. The separation from his father, who was then dangerously ill, so afflicted the latter, that he did not long survive it. Bulgarin began at a very early period to discover his attachment to literature, which was fostered by his teachers, through whom he acquired a knowledge of many foreign languages. In 1805 he entered the Ulan regiment of the Grand Duke Constantine, and was soon engaged in active service against the French. At the battle of Friedland he highly distinguished himself and was rewarded by the order of St. Anne of the third class. In the war between Russia and Sweden, he was in the vanguard under Count Kamensky, and penetrated as far as Torneo. On his second return to the capital he quitted the Russian service altogether, in

consequence of either some pique or unpleasant circumstances, and repaired to Warsaw, where some of his relations still resided. He thence proceeded to France, entered Napoleon's service, and in 1810 joined the army in Spain, in which the Polish legion was so distinguished. Of the events to which he was there an eye witness, and in which he personally shared, he has given an interesting narrative. He was next destined to bear a part in the memorable campaigns of 1813 and 1814; when about the beginning of the latter year, he was taken prisoner by the Russians; but after suffering many severities and hardships was released, and repaired to Napoleon's head quarters, where he obtained the command of a company of volunteers.

With the fall of his master under whose banners he had enlisted, Bulgaria's military career terminated, and his hitherto chequered and rambling life was exchanged for one more peaceable, yet as it has happily proved likewise far more productive of renown. He first fixed himself at Warsaw, where he began to exercise his pen in various humorous and poetical pieces in Polish, to the study of which language he had applied himself when with the army in Spain. Business of a legal nature requiring his presence in St. Petersburg, he was induced on meeting with some of his earlier friends and fellow students to remain in Russia. With the view of qualifying himself for becoming an author and turning his literary talents to some account, he set about recovering his Russian.

He soon after (1823) edited a periodical under the title of *Northern Archives*, and in 1825 another entitled the *Northern Bee*. In addition to numerous other miscellaneous pieces written since that time, including a large number of satirical sketches of manners, he is the author of *Ivan Vejeeghen* or *Vuizhigin*, or "Life in Russia" as it is called by the English translator. It is more properly a *Russian Gil Blas*. As a kind of continuation of this, Bulgaria has written the *History of Peter Ivanvitch Vuizhigin*. But his *chef d'œuvre* is *Demetrius*, an historical novel. For further particulars of these works, and an estimate of the literary merits of Bulgaria the reader is referred to the 9th vol. of the *Foreign Quarterly Review*, to which we profess ourselves to be indebted on the present occasion.

The historical sketch on the use of Tobacco merits attention. The excessive and general use of this detestable drug is, next to the use of ardent spirits, an evil, which most imperatively calls for reform. Why, in the name of common sense and humanity should children be brought up to rival their fathers in chewing, smoking and snuffing, and furnish hereafter materials for the bitter satire of another Mrs. Trollope. The assertion of this traveller that "the air of heaven is not in more general use among the men of America, than chewing tobacco," is not true; and yet every pa-

triotic American must wish that there were less foundation for such a remark. When this lady complains, in one part of her book of the annoyance of perpetual introductions to every turned-up shirt-sleeve neighbour, and to his being called a gentleman, we may smile at her pride; but when she speaks of these personages being so constantly redolent of whiskey and tobacco, we must feel that she touches a vulnerable point. We could wish that the compliment which she pays to the literary and professional men of this country were better merited; when she says that they were the chief if not the only exempts from the daily use of tobacco. Such ought to be the case. No clergyman, for instance, ought to have the hardihood to preach self-denial and regard for the feelings of one's neighbour, who himself, chews, smokes or snuffs, since he is constantly, by one or more of these practices, setting at naught his own precepts. Equal censure may properly be extended to physicians, who by similar indulgences set so bad an example to their friends and patients, and do in fact as far as in them lies, aid in bringing on those latter dyspepsia and all its horrors—nervousness, low spirits, palpitation at the heart, wakefulness, singing in the ears, ulcers of the tongue and mouth, impaired voice, perverted sense of taste, unnatural thirst, various diseases of the skin, &c.

We repeat it, this nuisance requires to be abated. At every turn one makes of an evening, and too often in the day time in this city, one meets with little chaps, some of whom from their size do not seem to have passed their second lustrum, puffing away with a segar, with all the mock gravity and knowing air of their seniors. There is surely a heavy responsibility resting somewhere in these cases. We leave it to parents, guardians and masters to say, what is their share of it.

DOMESTIC ECONOMY.

Domestic Economy, which consists in a due regulation and government of all one's household affairs, implies also an economy, that is a frugal and judicious use, of one's health, time and money; and a guidance of those under our charge agreeably to the rules of good morals and worldly prudence. It would be fortunate were domestic more frequently to divide attention with political economy, of which it is the first support, and to which it furnishes the necessary elements for both home and international legislation. Whatever credit the people may give to philanthropists for purity of intention, who allow their domestic concerns

to fall into irretrievable confusion, whilst attending to public affairs, they ought not to grant them their full confidence. We have no example of successful and judicious legislation and reform, by princes or leaders, whose domestic economy was not of the most methodical kind. Not to multiply examples, it will be sufficient for our present purpose, to cite the names of Peter the Great and Napoleon, among despotic reformers, and of Washington and Franklin, among republican ones.

Carrying out this idea a little further, we would say, that one great cause of the failure to establish free institutions on the continent of Europe, is the want of a knowledge and practice of domestic economy by most of those who have felt themselves impelled to take the lead. Many of those persons are well-read; many are sincere; but they are speculative reformers, they legislate from the ideas derived from reading, or from the practice of other people differently circumstanced, and not from the real wants and desired improvements in domestic economy, of their own countrymen.

Without good domestic economy there is very little personal comfort, and not much prospect of happiness either in one's self or the relations, respectively, of husband and wife, parents and children. Even mammon, the god of the world's idolatry, requires of his worshipers order, method, and continued attention to objects and ends; in fine, well regulated domestic economy.

We cannot be at a loss for materials for this department of our Journal, to which we hope without making constant attempts at freshness and originality, to be able to impart sufficient interest; though while trying to be correct, we shall at the same time avoid triteness.

A French Farmer's Wife.—The farmer's wife, says M. de Cubieres, bestows her attention and her daily cares on whatever is connected with the administration of the farm. She inspects the dovecote, the farm yard, the stalls, the dairy, the orchard, &c. She sells the vegetables, the fruit, the produce of the dairy, the ewes and their fleeces; to her is entrusted the gathering of hemp and flax, with the first operations these plants undergo. In the southern departments she has also under her management, the important business of rearing silk worms, and the sale of their produce.

She knows how to excite workmen to their labour: to the lazy, she gives a new life, by friendly remonstrances; and at the same time, she supports by her praises the zeal of the most laborious.

She knows how to inspire awe by a studied silence, and to insure obedience by the mildness of command; she renders all her laborers faithful, by bestowing on them a due share of her confidence.

It is she who presides daily at the preparation of their food; in their sickness she attends them with maternal care; on the days of rest she excites them to rural sports.

In short, surrounded by her laborers, her husband, her children who form her principal riches, she enjoys that felicity which springs from benevolence; she is happy, in the happiness she confers on others; and that large family free from fear, cupidity and ambition leads a happy and peaceful life.

Negligence.—Inattention to small matters, brings with it often a succession of losses. The following narrative by the celebrated Say, in his “*Essay on Political Economy*,” illustrates this truth in a very satisfactory manner. “I remember,” says this writer, “when I was in the country, witnessing an instance of the losses to which a household is exposed by negligence: For want of a latch of trifling value, the gate of the farm yard which opened into the fields was often open. Whoever went out pulled the gate after him; but as there was no means of shutting it, this gate was always a jar. Many of the farm yard animals had been on this account lost.

One day, a fine young pig got out and reached the neighboring wood. All were immediately in chase of the animal. The gardener was the first who got sight of it; and he in jumping over a ditch to stop its further passage, received a dangerous wound which confined him to his bed for a fortnight. The cook found on her return from the pursuit, that the linen which she had left at the fire to dry, was burnt; and the dairy maid having left in a hurry the cow stable without fastening the animals in it, a cow in her absence broke the leg of a colt which they were raising in the place. The days lost by the gardener were worth twenty crowns; the linen and colt were as valuable. Here then in a few minutes, for want of a fastening which would have cost a few cents, a loss of 40 crowns was encountered by persons whose duty it was to exercise the most rigid economy; without our taking into account the sufferings caused by the disease or the uneasiness and other inconveniences in addition to the expense.

POLITICAL SUMMARY.

It has been well said by Coleridge in his *Essays*: “Little prospective wisdom can that man obtain, who hurrying onward with the current, or rather torrent of events, feels no interest in their importance, except as far as his curiosity is excited by their novelty; and to whom all reflection and retrospect are wearisome.” What an impressive moral lesson is conveyed in a retrospect of public events, and the fate of public men, for the period of even a few years. Among the last items of European News is the death of the young Napoleon, duke of Reichstadt. Son of the

greatest warrior and most powerful sovereign of the age; hailed at his birth as king of Rome, a title of itself filling the mind with thoughts of power, grandeur and renown; a palace of the largest dimensions and with the most magnificent decorations was projected for his residence; the science and talent of the French Empire were to be enlisted in his education; the knowledge of the world in all the trying situations of life was to be imparted to him by his father, who with a natural fondness for the reputation of his child, had hoped to teach him how to temper mercy with justice, and to avoid the dark spots which tarnished the glory of his own career. But none of all these bright visions of the future were ever realised. Ere the child had seen his third summer, his father, conquered by a world in arms, was an outcast and a prisoner; and the young Napoleon was carried from Paris, that city in which he was to have ruled emperor and king, to Vienna where the title of duke was but mockery. He exchanged the most gay and intellectual, perhaps it may be said the most dissipated capital in Europe, for the dullest and yet the most dissolute. Here deprived even of the society of his mother, his years of childhood were succeeded by those of adolescence, and he finally had merged into the vigor of manhood, without being allowed to entertain hopes, or have any specific views to encourage him to mental exertion or aspirations after moral grandeur. History has yet to inform us whether his spirit pined and wore away its tenement by vain repinings, or that he sank a victim to indolence and sensual indulgences, to which a cunning and heartless policy may have been too prone to furnish incitements and opportunities.

The death of young Napoléon, by taking away a nominal chief and rallying point for a class of the disaffected to the present order of things in France, simplifies the play of political parties in that country; and affords additional chances of security to the throne of Louis Philip. Whatever may be the trammels with which the regular march of national liberty is still restrained in France, the time is now since past, when a Frenchman can be reproached, as he was during the reign of Louis XIV.; that on neither of the two subjects worthy of the human intellect; *politics* and *religion*, our state here and our state hereafter, dare he write. He has the privilege, and he often exercises it to an extravagant extent, of writing and talking concerning both. It would be well, however, if he would more frequently remember that although the privilege of talking and even publishing nonsense is necessary in a free state, yet the more sparingly we make use of it the better.

Belgium and Holland are still in that state of armed truce with each other, which either party would willingly break but for the intervention of the great powers, whose never ending protocols almost throw an air of ridicule over European diplomacy. The present posture of affairs, the result of the bitterly hostile feeling of the Dutch and Belgians towards each other, is sufficient commentary on the wisdom and policy of those statesmen, who in the congress of Vienna, resolved on uniting them under one head. These two people have nothing in

common. The Dutch are almost entirely commercial and advocates of free trade, by which they as brokers and agents, their towns being places of deposit and transit, find both wealth and importance. They are Protestants in religion, and are distinguished by a strong nationality in language, literature and long established usages and glorious recollections. The Belgians on the other hand, are an agricultural and a manufacturing people, and inclined to favour restrictive measures by which, under Napoleon, their manufactures had supplied the place of those of the English, which were excluded from the continent, and surpassed those of the French with whom they directly competed. They are Catholics and greatly swayed by their clergy; nationality they cannot be said to possess; in succession under the rule of Spain, Austria and France, they have no national history, nor literature, nor even language that deserves the name, for although it is nominally Flemish and Walloon the ambition of all classes leads them to escape the imputation of vulgarity by giving on every occasion a preference to the French.

In Germany affairs are coming to a crisis, the precise nature of which it is not easy to predict. The revolting anomalies in the German confederation contrast strangely with the practice of a really popular federal government, as enjoyed in the United States. Thirty-four monarchical states of very unequal extent, and four free cities, enter into a confederation as equal sovereignties. But it is evident that the actual government, of these states have very little common sympathies and interests. The unlimited despotism in Austria, mitigated rule in Prussia, representative government in Bavaria, with the addition of accountabilities of ministers in Wirtemberg, Baden, and Hesse Cassel; Hanover having for elector the king of Great Britain, Luxemburg, until recently, the king of the Netherlands, Holstein, the king of Denmark: all these contradictions and discordant elements forbid the hope of any wise and truly patriotic measures being adopted by the diet at Frankfort. This diet, the nominal government of Germany, consists of deputies from the powers above mentioned and others not necessary to notice at this time, such as Mecklenburg-Schwerin, Saxe-Weimar, Anhalt-Dessein, &c.; but they are only responsible to their respective governments, of course cannot act from their own convictions, or with a due attention to the wants of the other states. The greater territorial extent of Austria and Prussia, and their means of intimidation and corruption of the smaller states, which have no representative or responsible governments, give them paramount influence in the diet, which they exert to check, on all occasions, the progress of rational liberty and salutary reform. It could not of course be expected that the freedom of the press enjoyed in some of the constitutional states, as of Baden and Wirtemberg, should be viewed with a friendly eye by the courts of Vienna and Berlin, the more especially when their own views of policy were often treated by the public writers with very little respect, and hopes held out of an ultimate regeneration of Germany, by a real federal union.

At the late Diet held at Frankfort, some of the articles of the Congress of Vienna have been so construed, as to allow of repressive measures being adopted by the heads of the respective states, and in case of their refusal or inability to carry such measures into effect, the aid of the whole confederation is to be invoked and is also promised. The meaning, briefly, is that the press is to be gagged, and even the publication and dissemination of the speeches of liberal members of the representative bodies of the smaller states are to be prohibited; failing to do which at once, Austria and Prussia promise their *friendly interference* and assistance. The Diet whilst invoking the authority of the

Congress of Vienna, in support of their arbitrary and tyrannical enactments, say nothing of a fundamental article of the confederation which promises to all the states composing it representative governments.

The Protocol of the Diet has been proclaimed in due form in Hanover, the elector of which, does not seem to feel himself at all obliged to adhere to the forms of constitutional law for his German possessions, by which he is bound as king of England. The grand duke of Baden has also registered the protocol, and made enactments in conformity with its decrees directly at variance with the constitution of the state which he had sworn to support. In Wirtemburgh, the ministers of the king, have mildly but firmly protested against the application of the decrees of Frankfort, to any infringement of the constitution of that country, "whether as it regards the right of the States (Representatives) to assist in the passing of laws, and to vote the taxes, or whether relating to any other right assured to the citizens of Wirtemburgh."

Throughout all Germany the people are indignant at this tyrannical encroachment on, or rather abolition of the rights which were enjoyed in a few of the states, and which so far from being now utterly extinguished, ought to have been universally extended to all the states, including that of Prussia, the government of which is among the foremost in the work of oppression. The English and French press is loud in its condemnation of these arbitrary measures of the Frankfort Diet, and will serve not a little to stimulate the German people to systematic resistance to their present rulers. The parties are now in presence and the contest must be soon begun.

Whenever in European politics the question between might and right, and of the struggle between the oppressors and the oppressed is agitated; the mind naturally reverts to Russia, as a power ever the foremost in destroying the independence of the nations around, and malignantly, one might almost say, obliterating whatever remains of the liberty they may have enjoyed. Harsh, cruel, and uncompromising, she forgets the excellent maxim, that "the strongest is never strong enough to be *always* the master, unless he transform his power into right, and obedience into duty." Poland, unhappy Poland, so far from being conciliated by a fulfilment of those pledges solemnly made by Russia, before all Europe at the Congress of Vienna, was goaded by every species of tyranny into open resistance, rebellion it cannot be called; the melancholy termination of which is too well known to us all. And now where is the magnanimity of the conqueror; how kept, the promise made by the Russian autocrat during the struggle, that at all events the nationality of Poland should be preserved. Poor encouragement is afforded to the dictates of justice and honour, when both these virtues are so constantly and grossly outraged by their rulers. No treaty binds; no pledge is sacred with the despots of Europe beyond present interest or inability to make further inroads on freedom and constitutional laws. How is the nationality of Poland preserved? By proscribing and banishing to Siberia her most distinguished citizens; by closing up the sources of knowledge in the Universities of Wilna and Warsaw, and worse than all, tearing children from their parents and sending them away by thousands into the interior of Russia, to lose the recollection of their country, their language and their religion; to pine in want and slavery, or to be the future instruments in the hands of the despot for enslaving other nations, or perhaps massacreing, in some future struggle of their fatherland for independence, their relatives and even their parents! Well was it said, in a recent debate in the British Parliament, that no language can be too strong in denouncing before the whole civilized world the atrocity of such conduct.

But amidst our deep and heart-felt sympathy for suffering Poland, we cannot be blind to the fact, that her present misfortunes are the inheritance of former misconduct on the part of her nobles, and want of public virtue among her people. The nobles, more eager for their own personal aggrandizement than for the glory of their nation, were not ashamed to thwart the best efforts of some of their best sovereigns to relieve the country from anarchy and foreign invasion or influence. Selfishly retaining all their own privileges, they would neither consent to strengthen the sceptre of their king, nor to give liberty and education to their serfs and peasants. The people at large were not enlightened respecting their real condition and wants, and were content to be made the dupes and the victims of rival factions, who alternately courted and called in the Swede, the Saxon, the Russian, the Austrian, the Prussian and even the Turk, to interfere in the intestine disturbances of the country, and to bestow on Poland successive kings, supported by foreign swords.

In carrying our regards from Russian to Austrian tyranny and misrule, we at once have Italy before us, exhibiting, to use the language of the Metropolitan, "the melancholy picture of twenty millions of men, poor upon the most fertile soil, and under the most beautiful climate in the world. Wasting in futile literary disputes their fine intellectual qualities, without industry amid all the varied productions of nature, without commerce in the most admirable geographical position. And still possessing all the elements and all the traditions of the most brilliant destiny without a political existence." Italy like Germany, is divided into many states, which have not, however, even the appearance of any common principle of action, or rule of the federation. In the latter country, the dominant powers are still German; in the former, the influential parties are not Italian. Austria intrigues and intimidates at home, or north of the Alps: she tyrannises and oppresses in Italy; having direct possession and unlimited control over the Lombardy Venitian kingdom, and swaying by various means the other states, viz. of Sardinia, Rome and Naples. Tuscany is governed by a nephew of her Emperor; Parma and Placentia by his daughter Maria Louisa; and Modena by a creature of Metternich and the Jesuits. One great good has indeed been produced by this intolerant domination of Austria: it is the general hatred towards her now felt in all parts of Italy; the people of the several states of the peninsula, who had hardly a feeling in common, are now ready to combine on a fixed principle of action, viz: the expulsion of the Austrians, and future freedom from all foreign sway whatever. Piedmontese, Lombards, Romans and Neapolitans, have on this point a general unity of hopes and fears.

If we pass from the Ausonian to the Iberian peninsula; from Italy to Spain and Portugal, we meet with the same melancholy picture of nature's prodigality, and man's indolence and ignorance. Tyranny, bigotry and superstition, have done their work in these countries, and produced the deplorable spectacle of retrogradation in arts, arms and science, during a period when the rest of the Europe was pressing forward with various success in the career of improvement. The time was, when Spain was paramount in European politics; when her commerce was greater than that of any other nation; when her chivalry and her soldiers were the admiration and terror of the world. But now what is she? We will give the description in the language of the Foreign Quarterly Review.

"Idleness is the national sin of Spain: and with a population constitutionally averse to labour, and disposed to seek for subsistence by any means rather than by honest industry; with a government that carries on the work of brutification by all the expedients in its power, and through omnipotence of evil, is

utterly inefficient for good; and, lastly, with a domineering priesthood swarming in every street, village and hamlet of the kingdom, and amidst the universal misery fattening on the substance of the land which it keeps in spiritual thralldom, and intellectual darkness. With such elements to work on, such powers of evil to neutralize, such an intertexture of vice, corruption, ignorance and prejudice, to break through he must be a bold physician, indeed who should undertake to heal up the foul and festering ulcers that are daily eating deeper and deeper into the vitals of unhappy Spain."

In Portugal a war is now waging between two brothers, one to retain his usurped sceptre, the other to win it for his daughter Donna Maria. Miguel is the worst of tyrants; but Pedro is not at heart, or when opportunity allows of practice, either a humane or magnanimous prince, sensitively alive to his honor.—His advisers at this time at Oporto, the Marquis of Palmella and the Marquis di Villa Flor are not trust-worthy. Portugal may change her rulers by this contest, but other exertions are required to obtain rational freedom.

With the state of Great Britain and her politics, our readers are, we presume, tolerably conversant. The passage of her reform bill, already enables her to assume a more commanding attitude among the nations: one of the first and most gratifying proofs of which is, the special mission of Lord Durham to the Court of St. Petersburg, to hasten the assent of Russia to the final pacification of Belgium and Holland; and we may fondly hope, also, to tell that perfidious Court of the necessity of adhering to the article in the Congress of Vienna, by which the Duchy of Warsaw, (the late kingdom of Poland,) "shall be irrevocably bound to the Russian Empire *by its constitution*." On this and this only condition can Russia lay any claim to Poland. How is this obligation fulfilled by the Emperor Nicholas, when he now declares Poland to be an integral part of the Russian Empire!

ARTS AND ARTISTS.

It is a glorious sight to gaze on the imaginings of genius bodied forth in the fine forms of sculpture, or placed before us in the animated groups and brilliant colouring of painting. There is in these objects, expressive though mute eloquence; and one feels for the time elevated and ennobled into a state of mind responsive in a measure to that which first created them.

At this present moment, with pen in hand, we have before us a copy of that exquisite production of art, the *Ecce Homo* (Christ crowned with thorns) of Guido. True, it has not the magic coloring of the original; but the power of expression, the pious resignation under acute suffering and scorn, in fine all the merits of design, are well preserved in the lithographic engraving on which our eyes now rest. It is executed by P. Ancora of this city, whose freedom of pencil and firm yet soft touch, are, we venture to say, unsurpassed by any artist in the country. The *Ecce Homo* was a favourite subject with the Italian painters: it is also one of devout meditation to the zealous Catholic, and cannot be contemplated by any Christian without emotion and religious benefit.

Guido Reni was peculiarly qualified to shine in the annals of the pictorial art. Eminently handsome in his own person, he had a most delicate perception of beauty in the human face and figure; and perhaps no artist was more successful in fixing on canvass in all the charms of colouring, the tender expression of love and soft confidingness in female character; he was unrivalled in the bewitching softness of mouth and modesty of eye which he gave to the nymphs, graces and other productions of his pencil. His most exquisite spe-

cimen in this line is the Aurora, painted in fresco. Nor was he wanting in a grander style as exhibited in his Crucifixion of St. Peter, the Massacre of the Innocents, &c.

But one darling vice tarnished his reputation and clouded his happiness; it was his inordinate love of gaming. Great as were the rewards and honours which he received from popes and cardinals, and princes and nobles, he was at times reduced to great straits, which compelled him to work for immediate subsistence; and this was the cause of his painting in the latter years of his life in a slight negligent manner, without any attention to his honour or his fame.

Coytel. This artist affords another evidence of the determination of genius by irregular living. He painted much in the Palais Royal for the Regent of Orleans, grand-father of the present king of France: and it has been observed that the performances of the artist on the ceiling are much better than those on the walls, "which arises from Coytel having painted the roof first, and between the painting of the ceiling and the sides, he took to dram drinking, which soon spoiled his hand: and so much the sooner, because he had previously been a water drinker."

Corregio's Muleteer.—The picture of a Muleteer in the Orleans selection at the Palais Royal which was painted by Corregio, served for a long while as a sign of a public house by the road side. It has still the marks in the upper corners, of its having been doubled in for that purpose. The man who kept the house had been a muleteer, and had on some occasions obliged Corregio a good deal on the road. He set him up and painted his sign for him. The persons who were sent into Italy to collect pictures for the Regent, met with this sign, and bought it for a sum equivalent to about twenty-five hundred dollars.

MUSIC, takes perhaps still stronger hold on the feelings than painting. Its immediate effects are, certainly, of a more powerful kind, whether displayed in inciting men to battle, or inspiring tender and subdued emotions, or raising the soul to heavenly aspirations.

Instrumental performances affects us in two ways: by the varied richness and harmony of sound, and by difficulties overcome during the execution of the piece. One of the most, perhaps the most wonderful person that ever astonished the world by a combination of these two kinds of merit, is Paganini. At present we have not space for any critical notice of his professional character. We shall merely cite some parts showing the disposition of the man. The writer had just been speaking of the strange rumors of which Paganini was the subject.

"That such fictions should have got wind, is not at all to be wondered at; for, besides the circumstances which we have above noticed, the romantic gaiety of his disposition, and his love of gallantry in his younger days, were constantly prompting him to seek adventures and amusement by assuming different disguises and characters. Indeed the pleasure which he felt in making his audience stare and gape with astonishment was not always confined to the concert-room; it would seem that he would sometimes draw a long bow of another description, and enliven the conversation by retailing humorous anecdotes of his own invention. His masquerading propensities frequently found vent in travelling, and among strangers where he was not known; and we are told that, upon one occasion, finding himself seated *vis-a-vis* in a diligence with a very rich but not very bright fellow passenger, he contrived to dispel the

tedium of the journey by passing himself off for a certain well-known brigand, whose name at that time spread consternation and alarm throughout all Romagna—an announcement which, as it was any thing but belied by his personal appearance, produced an effect upon his companion of which, perhaps, we may form some idea by figuring to ourselves a condemned criminal on his way to execution.

“His whimsicalities, his love of fun, and many other points of his character, are so curiously exemplified in his fantasies. He imitates in perfection the whistling and chirruping of birds, the tinkling and tolling of bells, and almost every variety of tone which admits of being produced; and in his performance of *Le Streghe* (The Witches), a favourite interlude of his, where the tremulous voices of the old women are given with a truly singular and laughable effect, his *vis comica* finds peculiar scope.”

The remarks, which we now give, are at variance with the newspaper notice of this celebrated violinist.

“We know of no one who has been more cruelly misrepresented than the subject of this notice. In reality a person of the gentlest and most inoffensive habits, he is any thing rather than the desperate ruffian he has been described. In his demeanour he is modest and unassuming, in his disposition liberal and generous to a fault. Like most artists, ardent and enthusiastic in his temperament, and in his actions very much a creature of impulse; he is full of all that unaffected simplicity which we almost invariably find associated with true genius.”

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AND

RECREATION.

Health—the poor man's riches, the rich man's bliss.

"As much as in thee lies, live at heart's ease."

VOL. IV.]

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[No. 2.]

SANITARY CODE.

No government can be said to extend all that protection which is due to the persons of its citizens, which does not possess a well devised and strictly administered Sanitary Code. Laws may be framed and executed, securing, to each individual, immunity from personal violence, and from every unjust curtailment of his freedom, and yet, unless his health be also protected by the public authorities, he is, in many instances, as insecure in the enjoyment of his physical powers and even life itself, as he would be were the laws to extend to his person no protection whatever. It is true that most governments can produce from their statute books various enactments bearing the title of Health Laws. These laws, however, are in almost every instance based upon hypotheses long since abandoned by the medical profession as erroneous—while the attempt to carry them into effect has either completely failed, or has brought about and augmented the very evils they were intended to prevent. This is true of nearly all the quarantine and lazaretto systems now in existence—they are evaded with the greatest ease; or by interrupting the commerce and interfering with the mercantile interests of the country, they reduce a large proportion of its inhabitants to that very condition which is most favorable to the occurrence of malignant and fatal diseases. It is at home that the causes of sickness must be looked for. Instead of vain attempts to prevent their importation from abroad, unceasing care should be taken to prevent or destroy them where they actually exist.

In the municipal regulations of our principal cities, we find that this important precaution has not been entirely overlooked. We have provisions for keeping the streets in a state of cleanliness; for preventing or correcting nuisances, and prohibitions against the sale of certain unwholesome articles of food in our markets. So far

as these regulations extend they are deserving of commendation, though in many instances the citizens are prevented from experiencing from them, all the good they are calculated to produce, owing to the very imperfect manner in which they are carried into effect. But something more than is embraced in these regulations is required. Causes destructive to health and life exist in every city, for the prevention of which the law makes no provision; and it is only in anticipation of, or during the prevalence of some fearful epidemic, like that now pervading the earth, that they attract the attention of the citizens generally. At other times their very existence is unknown, or if known excites no alarm. To the influence of many of these deleterious causes the whole community is more or less subjected; but the majority of them, are experienced to the greatest extent or solely by the poor and labouring classes; who can hope for no means of protection from them, excepting in the interference of the legislature.

It is in vain that our principal streets are kept clean, if filth is allowed to accumulate in the narrow courts and alleys, which exist in too great numbers in most of our cities; or even when the condition of these is properly attended to, it is insufficient unless the dwellings themselves which are situated in them, be kept clean also, and properly ventilated.

A Sanitary Code, calculated to preserve the health of the community, must provide not only for the maintenance of public and domestic cleanliness, but for the proper ventilation and dryness of dwellings; it must prohibit the crowding together of too many individuals; and the placing of sinks and other receptacles of filth within or too near to the houses. The laying out of narrow courts and alleys should be strictly forbidden, while it makes provisions for widening, so soon as it can be done without serious loss to the owners of property, those which now exist. It should provide, also, against the sale of provisions to the poorer classes, which are either damaged or are otherwise injurious to health, and lend its aid towards discouraging the use by them of intoxicating drinks. There are many other points necessary to be embraced in a proper Sanitary Code, which we pass over at present, as it is our intention to return to the subject from time to time, until we have laid before our readers all our views in relation to it.

We are perfectly well aware that many of the provisions we shall recommend, will be considered by some as arbitrary, and by others as inexpedient. It is too much the custom to cry out, that in a free government, it is better to enlighten the public mind on the subject of existing evils, and in this manner to provide for their extinction, than to attempt their removal by legislative enactments. The same argument would hold good, however, against all laws. In a free government, every law is or should be virtually the expression of public sentiment on the subject to which the law relates. To attempt the prevention of abuses, or of acts injurious either to individuals, to a neighbourhood or the public at large, without the aid of laws enforced by penalties, would answer probably in a Uto-

pian form of government and with a community among which there existed no careless and inconsiderate members, no evil disposed persons, nor any whose actions are dictated by selfish and avaricious motives, rather than by a reference to the public good. We are persuaded, however, that in the state of society in which we live, it is only by legislative enactments that all can be induced to recognize and obey what public opinion declares to be just and proper.

A SKETCH OF THE CLIMATE OF THE VALLEY OF THE MISSISSIPPI.—BY DANIEL DRAKE, M. D.

The vast extent of the Valley of the Mississippi, necessarily imparts to its climate a diversified character. The new states and territories already organized within its limits, are eight in number; while portions of two of the old states extend into the same region. The new may be divided into warm and temperate. The former are Louisiana, Mississippi, Alabama, in part, and the south half of the Territory of Arkansas;—the latter, Tennessee, Kentucky, Ohio, in part, Indiana, Illinois, and Missouri. The first group lies between the latitudes of 30 deg. and — deg.; the second, extends from the parallel last mentioned, to that of 42 deg. Hence the first division corresponds with South Carolina and Georgia—the second, with North Carolina, Virginia, Maryland, Delaware, New Jersey, and the southern part of New York.

In estimating the change of climate, to which emigrants from the old states will subject themselves, in settling in the new, it should be recollected, that Tennessee is in the rear of North Carolina, and Kentucky of Virginia; and that Ohio, Indiana, Illinois, and Missouri, stretch out behind Pennsylvania, Maryland, Delaware, New Jersey, and the southern part of New York. The New-Englander, and New-Yorker, north of the mountains of West Point, should bear in mind, that his emigration is not to the *west*, but *south-west*; and as necessarily brings him into a warmer climate, as when he seeks the shores of the Delaware, Potomac, or James' River.

Besides variations of latitude, several causes conspire to produce diversities in climate. Between the lower Mississippi states, and the portions of the old states corresponding with them in latitude, these causes are neither numerous nor powerful; and hence, on the same parallels, their difference of climate, are less, than the differences between the upper states of the great valley, and corresponding portions of the Union, near the sea board. First, the elevation of the land above the surface of the ocean, is nearly the same in Louisiana, Arkansas, Mississippi, and Alabama, as in Georgia and South Carolina. Second, their geographical relation to the sea, is similar. Third, neither of them is contiguous to mountains, except the N. W. portions of South Carolina. Hence the emigrant from the banks of the Santee or Savannah river, to those of the lower Mississippi or Red River, if he keep in the same latitude, will experience but little change of climate. He will observe, however,

in his new residence, that N. E. winds, attended with cool rains, are less frequent; and on the contrary, that the S. W. wind is more prevalent and perhaps more humid; as it does not, like that of the country he had left, undergo, to any extent, the modifying influence of the peninsula of Florida. The northern parts of Alabama and Mississippi, are occasionally visited with snows several inches deep, and frosts that congeal the surface; but their duration is transient; while in the southern parts of the same states, in Arkansas and in Louisiana, these phenomena are much rarer. In their upland parts, these warm states have, on the whole, winters dry, frosty, and bracing: in the maritime portions, raw, humid, and rainy. In the former, the summers are fair and not intemperate; in the latter, hot, infested with thunder gusts, and often sultry.

The inhabitant of New England, or, indeed, of any of the old states north of the Potomac, who starts on a migration to the states which are bounded on the South by the Gulf of Mexico, should be prepared to encounter a decided change of climate, consisting, in increased heat throughout the year, and, especially, in a prolonged summer; in more copious rains, and a greater prevalence of S. W. winds.

The emigrant from the shores of the Mediterranean, will find in this portion of the valley of the Mississippi, the nearest approach to his own climate, though eight or ten degrees further south; but he should prepare himself for greater extremes between summer and winter, than he has been accustomed to in Italy or the South of France.

The greater emigration to the upper or temperate Mississippi states, than to the lower, renders the study of their climate compared with the Atlantic states and Europe, more interesting than the inquiry through which we have just passed.

As in some cases, it is not less useful to inquire into causes, than to look merely at effects, I shall direct the attention of the Profession, and of those who contemplate an emigration from the Atlantic to the Western states, to some of the physical circumstances which may be presumed to modify the climates of the two regions.

First, the Atlantic states have an ocean on one side, lakes on another, and mountains, between 2000 and 3000 feet high, on a third; the first and last of which, are so contiguous to the emigrating portions of these states, as to exert a decided influence on their climate. On the other hand, the upper or temperate Mississippi states, are remote from the sea, and comparatively remote from mountains, but have on one side, more extensive lakes, than those which skirt the Atlantic states. The ocean lies to the *east* of the latter, and the Alleghany Mountains to the *west*, while the states of the interior, have the lakes to the *north*, and the Alleghanies to the *east*; varieties in the physical geography of the two sections, that cannot fail to exert an influence on the temperature and humidity of their winds. Thus the N. E. and S. E. winds of the sea board, are always much more damp than those of the interior. In spring, summer, and autumn, they bring more copious rains,

and in winter, deeper snows. They are, also, more frequent and violent, than in the upper Mississippi states. Finally, in winter they are warm; and in summer, as coming from the surface of the ocean, would be more fresh and temperate, than in the valley of the Mississippi, were it not for the Alleghany Mountains, which cool the currents which roll over them to that region. These mountains on the other hand, reduce the temperature and refresh the S. W. and W. winds, which blow from the interior of the continent towards the Atlantic Ocean, and give to the people of the middle maritime states, a succession of less sultry breezes in summer, than envelope their brethren in the west. For a similar reason, the N. W. wind is drier and colder, at the same season, on the leeward, than the windward side of the Alleghanies.

Second, The courses of rivers, by changing, in some degree the direction of the winds, exert an influence on our climates. In the Atlantic states, from New England to North Carolina, the rivers run more or less to the S. E. and deflect the winds which blow from the West; while the great bed of the Mississippi, exerts an equal influence in augmenting the number and steadiness of the winds, which blow over it from the S. W.; and here is another cause of difference in climate, chiefly perceptible, first, in the temperature, which if no counteracting cause existed, they would raise in the West, considerably above that of corresponding latitudes in the East; secondly, in the moisture of the two regions, which is generally greater, west than east of the mountains, when the S. W. wind prevails, as much of the water with which it comes charged from the Gulf of Mexico, is deposited before it reaches the country east of the Alleghanies.

Third. The great cities of Boston, New York, Philadelphia and Baltimore, are but a few feet above the level of the sea, and the country connected with them has but little elevation; while the towns which are rising on the banks of the upper Mississippi, the Missouri, Wabash, Ohio, Cumberland and Tennessee rivers, are elevated about 550 feet above the surface of the ocean, and the intervening country, about 250 feet more. The influence of this elevation, so often overlooked in comparing the climate of the Eastern and the Western states, would give cooler summers to the latter than the former, were it not for the greater prevalence of S. W. winds in the region of greater elevation. To estimate the full effect of this superior elevation, it is necessary to refer to the increasing altitude, of the immense, unwooded plain, down which the Missouri flows, from the Chippewan or Rocky Mountains, which themselves rise to the varying height of 5, 6, or 7000 feet, and give to the western winds, which would, otherwise, arrive moist and temperate, from the Pacific Ocean, a decided character of transparency and coldness.

Fourth. The general inclination of the surface of the Atlantic states, is to the E. and S. E.—that of the Mississippi states to the S. Were these angles of inclination great, their effects upon the temperature of the two regions would be decisive; but being slight,

the increased heat of the West, from this cause, is not, perhaps, very considerable.

Fifth. The West abounds in lofty forests of far greater extent than the East; an element of difference in the climates of the two, the influence of which must be admitted, although its exact amount cannot, perhaps be estimated. Forests are said to retard the velocity of the winds, and increase the precipitation of their moisture. It is more certain, that in spring, summer, and autumn, they intercept the rays of the sun, most of which are thus reflected before they reach the surface of the earth, and copious evaporation is thus prevented. They seem, also, to promote the condensation of the vapor, from the surrounding air; and may be considered as one of the causes of the more copious dews, which are said to fall west than east of the mountains.

Such are the leading causes, of any difference of climate, which may exist between the states which lie on the sea, and those on the upper Mississippi, and its tributaries. These differences, especially in temperature, have been much dwelt upon, ever since the publication of Mr. Jefferson's celebrated Notes on Virginia, in 1781. But as it respects the heat of summer, they have been greatly overrated. Two causes have contributed to augment and perpetuate the error; first, the extensive popularity of Mr. Jefferson's book; secondly, the great number of emigrants from New England and New York, most of whom have been unconscious how much they had changed their latitude in a migration to the interior, and have made reports concerning the heat of the latter, in the same language as if they had travelled on the latitudes on which they were born. As a general fact, the *settlers* from Virginia in Kentucky, and from Maryland and Pennsylvania, in the states north of the Ohio, have not complained of hotter summers, than they had been accustomed to experience in their native land. It is probable, however, that the summer temperature of the West, is rather greater than that of the East, in corresponding latitudes; an effect, as far as it exists, to be ascribed chiefly to the greater prevalence of S. W. winds, in the former, than the latter, and to the influence of the Alleghany Mountains, over which those winds must pass to reach the Atlantic states. Both these causes, however, are in a good degree compensated, by the greater elevation of the interior, as already pointed out. So great is the effect of this elevation, that in the middle of the state of Ohio, which is nearly 1000 feet above the level of the sea, the temperature is probably lower, than in corresponding latitudes of eastern Pennsylvania.

To solve the problem of comparative temperature, accurate contemporary observations, should be made on compared thermometers, placed under similar circumstances, in a great number of situations; but this has not yet been done. The only points, that admit of a comparison approaching to this, are Cincinnati and Philadelphia, or its vicinity—the former, however, situated about 50 minutes south of the latter.

From a series of daily observations in Cincinnati or its vicinity,

for eight successive years, the mean annual temperature has been ascertained to be 54 degrees and a quarter; Dr. Rush states the mean heat of Philadelphia at 52 degrees and a half; Dr. Coxe, from six years observations, at 54 and a sixth, and Mr. Legaux, from 17 years observations at Springmill, a few miles out of that city, at 53 and a third; the mean term of which results, 53 and a third, is but the fraction of a degree lower, than the mean heat of Cincinnati, and actually less, than should be afforded by the difference of latitude.

A reference to the mean temperatures of summer and winter, will give nearly the same results. From nine year's observations, (three at Springmill by Mr. Legaux, and six in Philadelphia by Dr. Coxe,) the mean summer heat of that part of Pennsylvania, appears to be 76 degrees and six tenths. The mean summer heat at Cincinnati, for an equal number of years, was 74 and four tenths. The average number of days, in which the thermometer rose to 90 degrees or upwards, during the same period, was 14, each summer; and the greatest elevation observed was 98 degrees: all of which would bear an almost exact comparison, with similar observations in Pennsylvania. Mr. Legaux states the most intense cold, at Springmill, from 1787 to 1806, to have been 17 and five tenths degrees below cipher—while within the same period, it was 18, at Cincinnati. The average of extreme cold for several years, as observed by Mr. Legaux, was one and eight tenths of a degree below cipher: the same average at Cincinnati, is two degrees below. From all which we may conclude, that the banks of the Delaware and Ohio, in the same latitudes, have nearly the same temperature.

(*To be concluded in our next.*)

THE HEALTH OF THE POOR.

The following hints to the poor on the means for preserving their health are extracted, with some slight alterations, from a paper written by Dr. Ferriar, of Manchester.

1. The health of the poor will always be materially injured by the following circumstances: living in small back buildings, especially when adjoining to the open vaults of privies; or in houses, and particularly cellars, where the streets are not paved or properly drained; or in narrow bye courts and lanes where filth is allowed to accumulate; and, perhaps, more than all, by living crowded together, in dirty apartments, where they cannot enjoy the common comforts of light and air.

2. The poor should, if possible, avoid living in damp cellars; they destroy the constitution and shorten life. No temptation of saving from the lowness of the rent can counterbalance their ill effects. The poor are apt to crowd into the cellars of new buildings, supposing them to be clean. This is a fatal mistake. A new house is always damp for the first year or two, and the cellars under them, are generally as moist as the bottom of a well. The inhabitants of such places are liable to serious diseases, which often

throws the patient into a decline; they are apt, also, to contract colds, rheumatic and other complaints, which continue for a long time, and disable them from working.

3. If the circumstances of a family be such that they cannot avoid living in a cellar, they should be attentive to have all the windows put in good repair before they venture into it; as well as to have it thoroughly cleaned and whitewashed. If any one attempt to occupy a cellar with broken windows or in a filthy condition, colds and fevers will be the certain consequences. The above remarks will equally apply to every kind of dwelling.

4. In many instances the families of the poor sleep in small back rooms, or in back cellars, which are without windows, and have no circulation of air. It would be much more healthy to sleep in the front apartment: when the family is numerous, as is often the case, its members should at least, be divided between the rooms, so that the whole of them are not crowded together in one small apartment. The rooms in which many poor families sleep are literally dungeons: more unwholesome places could scarcely be imagined.

5. The poor would do well to keep their houses and their persons scrupulously clean. They should not regret the loss of an hours wages, when their time is occupied in attending to cleanliness. It may be the saving of a month's sickness. It is better for the whole family to give up a little time occasionally, in order that the house be kept neat, than that even one of them be destroyed from the effects of an impure air engendered by filth.

6. The beds and bedding on which the family sleep should be carefully attended to. It would be of great service could they be aired every fair day in summer, and twice a week in winter.

7. Children should be washed from head to foot with warm water, before they are sent to school or to work in the morning. Care should be taken to keep them dry in the feet, and they ought never to be allowed to go to work without having their breakfast, though the parents may have nothing more to give them than a crust of bread and water. Children who get wet feet, or go out in the morning fasting, are liable to severe colds, bowel complaints and fever.

8. It is unnecessary to remind the poor that much sickness and unhappiness is occasioned amongst them, by passing their evenings or spare time in grog shops. The use of intoxicating drinks is in fact a cause of much of the evil and sickness they experience. The money wasted in their purchase would increase their health and their happiness, were it expended in the purchase of wholesome food, or comfortable clothing for themselves and families.

9. In winter a warm and substantial dress, though of coarse materials, is a better preservative of health, and far more respectable in appearance, than flimsy finery, however it may excite the envy of an ignorant neighbour or companion.

BOTANICAL MEDICINE.

"I doctor'd him mostly with yarbs."

The Spy.

Quackery assumes almost every year a new guise. The moment the public get tired or disgusted with it under one form, it is presented to them under another, and they become again its ready dupes. Botanical medicine, which professes to cure disease without affecting the constitution, would appear at the present moment to be, with a large portion of the community, the most popular disguise of quackery. We are persuaded that it will shortly eclipse in its wonder working effects the panaceas, catholicons, and syrups which have so long frightened disease of every kind, and shape, and hue, from the systems of our citizens.

The theory of Botanical Medicine is, that all remedial virtues are confined solely to vegetables, and that the use of substances obtained from the mineral kingdom together with the lancet, are destructive to the constitution under every circumstance. As the professors of their system make great use of the hot and vapour bath, we presume that in their new arrangement of natural substances, water and heat are included among the vegetables.

Many may suppose that Botanical doctoring is a recent discovery, and patented according to the act of Congress; but we assure our readers that this is not the case, as all may be convinced by referring to Garwood's "*Familie Herbal*" published some hundred years ago, from which we are convinced the idea of the system was stolen by its modern revivers. "The mediciners," says the learned author of the herbal, "dive into the entryals of the earth for mynerals from which, by the effects of fire in their alembychs they do extract deadly poysons, and call them by the name of remedys; when on the surface of the earth, in open day, nature doth present in her choyce store of herbs, innocent cures for all the aylments of the human body, which expel the morbid humours mildly, without hurting persons of the tenderest frame."

It is certain, however, that the system here shadowed forth, has found the greatest number of admirers and advocates, in our own land. All the *yarb* and root doctors, the Indian doctors and doctoresses who have flourished from the earliest colonial times to the present moment, are true disciples of botanical medicine. We recollect an old lady that practiced medicine in Philadelphia some thirty years ago, who protested as loudly against all other than vegetable remedies, as any modern professor of the botanical school; and so well convinced was she of the correctness of her principles, that we verily believe she would rather have died than take a single grain of jalap, ipecacuanha or any such doctor-stuff. This last phrase being with her only another name for anti-vegetable. Now we trust our readers will not laugh at what they may conceive the ignorance of this female Esculapius, when we assure them that "one of the great lights" of the system, not long since

asserted in our presence that cream of tartar and morphia were dangerous minerals.

It is really amusing to hear some of our goodly citizens of both sexes, who have been recently inducted into the mysteries of the new botanical creed, talk of the innocency of plants, their tinctures and infusions; and the horrid effects produced by every atom of mercury, tartar emetic, and steel introduced into the human stomach. Their ideas of vegetables and of their properties generally, would appear to be drawn from a careful study of a bunch of pot-herbs or a handful of dandelions. We believe them guiltless of any knowledge of the fact that upon the list of poisons the greatest number and the most deadly are those from the vegetable kingdom. That the virulence of arsenic bears no comparison with that of prussic acid; that mercury, however injudiciously administered, kills not half so certainly as an over dose of opium or stramonium; that the lancet in the least experienced hand, is not by any means so dangerous to a patient, as a draught of their own famous tincture of lobelia, and that no poison which can be obtained from the mineral kingdom exceeds in potency the oxalic acid.

The system of herb-doctoring had its very origin in ignorance, however much it may be now recommended and supported from motives of cunning, of interest, or of fraud. Like other species of folly and deceit, it must however, have its day, after which it will quietly descend to the same oblivion, where rest the thousand and one inventions of quackery that have preceeded it.

CONTRADICTIONS OF CHARACTER.

1 September, 1729, Sir Richard Steele died at Llangunner, his seat near Caermarthen, in Wales. He was born in Dublin, either in 1671 or 1675. He is justly celebrated as an essayist in conjunction with Addison, himself barely remembered as having been a dramatist, and almost forgotten as a politician.

Pope said that Steele, though he led a careless and vicious life, yet had nevertheless a love and reverence of virtue. The life of Steele was not that of a retired scholar; hence his moral character becomes more instructive. He was one of those whose hearts are the dupes of their imaginations, and who are hurried through life by the most despotic volition. He always preferred his caprices to his interests; or, according to his own notion, very ingenious, but not a little absurd, "he was always of the humor of preferring the state of his mind to that of his fortune." The result of this principle of moral conduct was, that a man of the most admirable abilities was perpetually acting like a fool, and, with a warm attachment to virtue, was the frailest of human beings.

In the first act of his life we find the seed that developed itself in the succeeding ones. His uncle could not endure a hero for his heir; but Steele had seen a marching regiment; a sufficient reason with him to enlist as a private in the horse-guards: cocking his hat, and putting on a broad sword, jack boots, and shoulder belt, with

the most generous feelings he forfeited a very good estate. At length ensign Steele's frank temper and wit conciliated esteem, and extorted admiration, and the ensign became a favourite leader in all the dissipations of the town. All these were the ebullitions of genius, which had not yet received a legitimate direction. Amidst these orgies, however, it was often pensive, and forming itself; for it was in the height of these irregularities that Steele composed his "Christian hero," a moral and religious treatise, which the contritions of every morning dictated, and to which the disorders of every evening added another penitential page. Perhaps the genius of Steele was never so ardent and so pure as at this period; and in an elegant letter to his commander, the celebrated lord Cutts, he gives an interesting account of the origin of this production, which none but one deeply imbued with its feelings could have experienced.

"TOWER GUARD, MARCH 23, 1701.

"*My Lord*—The address of the following papers is so very much due to your lordship, that they are but a mere report of what has passed upon my guard to my commander; for they were writ upon duty, when the mind was perfectly disengaged, and at leisure in the silent watch of the night, to run over the busy dream of the day; and the vigilance which obliges us to suppose an enemy always near us has awakened a sense that there is a restless and subtle one which constantly attends our steps. and meditates our ruin."*

To this solemn and monitory work he prefixed his name, from this honorable motive, that it might serve as "a standing testimony against himself, and make him ashamed of understanding, and seeming to feel what was virtuous, and living so quite contrary a life." Do we not think that no one less than a saint is speaking to us? And yet he is still nothing more than ensign Steele! He tells us that this grave work made him considered, who had been no undelightful companion, as a disagreeable fellow—and "The Christian Hero," by his own words, appears to have fought off several fool-hardy geniuses who were for "trying their valor on him," Thus "The Christian Hero," finding himself slighted by his loose companions, sat down and composed a most laughable comedy. "The Funeral;" and, with all the frankness of a man who cares not to hide his motives, he tells us, that after his religious work he wrote the comedy because "nothing can make the town so fond of a man as a successful play."† The historian who had to record such strange events, following close on each other, of an author publishing a book of piety and a farce, could never have discovered the secret motive of the versatile author; for what author had ever such honest openness of disposition?

Steele was now at once a man of the town and its censor, and wrote lively essays on the follies of the day in an enormous black peruke which cost him fifty guineas! He built an elegant villa, but, as he was always inculcating œconomy, he dates from "The Hovel." He detected the fallacy of the South-sea scheme, while he

* Mr. Nicholas's "Epistolary correspondence of Sir Richard Steele," vol. I p. 77.

† Steele has given a delightful piece of self-biography, towards the end of his "Apology for himself and his writings," p. 80, 4to.

himself invented projects neither inferior in magnificence nor in misery. He even turned alchemist, and wanted to coin gold, merely to distribute it. The most striking incident in the life of this man of volition was his sudden marriage with a young lady who had attended on his first wife's funeral—struck by her angelical beauty, if we trust to his raptures. Yet this sage, who would have written so well on the choice of a wife, united himself to a character the most uncongenial to his own; cold, reserved, and most anxiously prudent in her attention to money, she was of a temper which every day grew worse by the perpetual imprudence and thoughtlessness of his own. He calls her "Prue," in fondness and reproach; she was prudery itself! His adoration was permanent, and so were his complaints; and they never parted but with bickerings:—yet he could not suffer her absence, for he was writing to her three or four passionate notes in a day, which are dated from his office, or his bookseller's, or from some friend's house—he has risen in the midst of dinner to dispatch a line to "Prue," to assure her of his affections since noon. "Prue" used poor Steele at times very ill; indeed Steele seems to have conceived that his warm affections were all she required, for lady Steele, was usually left whole days in solitude, and frequently in want of a guinea, when Steele could not raise one. He, however, sometimes remonstrates with her very feelingly. The following note is an instance:

"*Dear Wife*—I have been in great pain of body and mind since I came out. You are extremely cruel to a generous nature, which has a tenderness for you that renders your least dishumour insupportably afflicting. After short starts of passion, not to be inclined to reconciliation, is what is against all rules of Christianity and justice. When I come home, I beg to be kindly received; or this will have as ill an effect upon my fortune as on my mind and body."

In a postscript to another billet, he thus sneers at lady Steele's excessive attention to money. "Your man Sam owes me three pence, which must be deducted in the account between you and me; therefore, pray take care to get it in, or stop it."

Such despatches as the following were sent off three or four times in a day.

"I beg of you not to be impatient though it be an hour before you see
Your obliged husband, R. Steele."

"*Dear Prue*—Don't be displeased that I do not come home till eleven o'clock.
Yours ever."

"*Dear Prue*—Forgive me dining abroad, and let Will carry the papers to Buckley's.
Your fond devoted R. S."

"*Dear Prue*—I am very sleepy and tired, but could not think of closing my eyes till I had told you, I am dearest creature your most affectionate faithful husband,
R. Steele."

"From the Press, One in the morning."

It would seem by the following note, that this hourly account of himself was in consequence of the connubial mandate of his fair despot.

"*Dear Prue*—It is a strange thing, because you are handsome, that you will not behave yourself with the obedience that people of worst features do—but that I must be always giving you an account of every trifle and minute of my time. I send this to tell you I am waiting to be sent for again when my lord Wharton is stirring."

Yet Steele, gifted at all times with the susceptibility of genius, was exercising the finest feelings of the heart; the same generosity of temper which deluded his judgment, and invigorated his passions, rendered him a tender and pathetic dramatist; a most fertile essayist; a patriot without private views; an enemy whose resentment died away in raillery, and a friend who could warmly press the hand that chastened him. Whether in administration, or expelled the house—whether affluent, or flying from his creditors—in the fulness of his heart he perhaps secured his own happiness, and lived on, like some wits, extempore. But such men, with all their virtues and all their genius, live only for themselves; they are not links in the golden chain of society. Steele, in the waste of his splendid talents, had raised sudden enmities and transient friendships. The world uses such men as eastern travellers do fountains; they drink their waters, and, when their thirst is appeased—turn their backs on them! Steele lived to be forgotten. He opened his career with folly; he hurried through it in a tumult of existence; and he closed it by an involuntary exile, amidst the wrecks of his fortune and his mind.*

JOURNAL OF HEALTH AND RECREATION

PHILADELPHIA, OCTOBER, 1832.

The practice, we might say the principle, of voluntary associations, for the purpose of reforming abuses which cannot be reached by common course of law, or which the government is too slow or timid in correcting, seems to be a prevailing fashion of the age we live in. Some of these are for obtaining a reform of evil practices through all branches of the community—such are Temperance Societies. Others have in view the protection of the essential interests of their class or calling; as in the Associations of Working-men. Restricted to few and well defined objects, we deem these latter justifiable and even praise-worthy. The evil most to be dreaded by the industrious citizens composing them, is that they may be induced by the manœuvres and intrigues of a few interested individuals, to agitate questions and adopt measures foreign from the primary intention of the associates, and which they have both the right and power to act in, as citizens of the commonwealth, but which they can hardly attempt a special control of, without a direct encroachment on others, who are content with the general action on the subject by discussion and vote. The Banking Institutions for example, are denounced by working men in an Association as monopolies. The abolition of imprisonment for debt is recommend-

* Calamities of authors, ii. 161.

ed by the same body. Now it strikes us that these and some other subjects, which we could mention, discussed by the Association, are very grave questions, the decision of which concerns the community at large as much as the working men. Associations of merchants, of mariners, of lawyers, of doctors, might with equal propriety take them up and claim legislative action on them, in reference to their own particular interests, of property and person.

The true democratic practice in agitating a measure of reform, which is to be made valid by legislative enactment, is to present it to the public at large, set forth its bearing by writing and speech, invite discussion on its merits, and finally, if need be, make it a question at the polls, a party test; but in all this we ought not to hear the voice or witness the special influence of an association by whatever name called. It is competent legally and politically for any man to originate the question and to discuss it; but not because he is a mechanic, or a farmer, or a merchant, or a lawyer; nor ought his arguments be merely to influence a particular body or calling, but his fellow citizens at large, and always in reference to its bearing on the majority. A different course than this would convert Associations into exclusive and monopolising bodies worse than any against which they now declaim.

The case is widely different when such Associations express their opinions, and call upon their members to act respecting grievances under which they chiefly suffer, and to propose amendments which, while benefiting them, do not militate against the just rights and interests of other portions of their fellow citizens. Hence they cannot be blamed, on the contrary we must admit their intentions to be praise-worthy, when they inquire into the possible and practicable improvements in the present system of education "among the people with special reference to the internal economy of factories," also "the consideration of the 'Ten Hour System,'" or the portion of the twenty-four hours, during which a man ought to be expected or required to work, without injury to his health and deprivation of the society of his family. The working men have also, it would seem to us, a right to inquire into "the expediency of a *lien law*, which shall protect the property of the actual labourers as well as master workmen."

We venture these remarks in a spirit of real regard to the working men, to the promotion of whose health and comfort we have always had a steady eye; a disposition of our's displayed as well by our frequent hygienic directions addressed to them, as by our determination more than once expressed to obtain for them the benefit of *public gymnasia* and *public baths*.

The New England Association of Working Men, which recently met in Convention at Boston, recommended previous to their adjournment "the holding of a National Convention of Working-Men, at *Philadelphia*, in October 1833."

A Good Sign. We were not a little pleased to see among the rallying words at the recent general election held in this city 'TEMPERANCE' displayed in large capitals. It matters not by which party, nor with what degree of sincerity it was upheld. The fact of its having been done so, is testimony in favour of the growing popularity of the cause of Temperance, and shows that it is now thought worth while to make it a means of appeal to a portion at least of the people.

If pledges are ever to be justifiably required of candidates for popular favour in the legislature or city councils, we know of no pledge which could with greater advantage to the community be demanded, than that they should promise to use their utmost legitimate endeavours to diminish, and finally prevent the manufacture and with it the sale and consumption of ardent spirits. When we find in the single county of Beaver, more than eight hundred members of Temperance Societies, we can hardly be thought to agitate this question too prematurely, or to allow our hopes to go very far in advance of probable realization.

Malt Liquors. The brewers in Poughkeepsie, New York, Baltimore and Philadelphia, all complain of the greatly diminished consumption of malt liquors, during the last six months. Of this fact, when regularly attested by them who are necessarily the first to become acquainted with and to feel it, we do not entertain the least doubt. But we do confess ourselves to be sceptical in regard to the allegation, that the abandonment of malt liquors as a drink by those formerly using it, has been followed by an increased consumption of ardent spirits by these same persons. Should this turn out to be the case, however, it proves what we have so often asserted; viz: that they who believe in the necessity of using, as a beverage, the artificial stimuli of fermented and distilled liquors, and who do accordingly use one or more varieties of either of the two classes of drinks, are in continual danger from two things: 1st, that they will go on increasing the quantity so far as to produce intoxication, and materially affect their healths and damage their lives; or 2d, that, for the sake of a variety of stimulus to the palate or by the advice of others, they will change the drink, and pass from a

weaker to a stronger stimulus, from one which, though not healthy, is productive of fewer evils, to one manifestly detrimental and even poisonous.

A young man, for example, whose circumstances are supposed to allow of it, begins, with the very best intentions and a real dislike of excess and drunkenness, to drink a glass or two of wine daily—or a little brandy and water. He may do this for a length of time, perhaps for a life-time, without much change. But the probability is, speaking from the experience of those who have preceded him on the stage of the world, that, in the languor from toil mental or bodily, in depressed spirits, in the forgetfulness of prudential maxims in company, he will to-day increase the allowance of yesterday, and that, some one or more of the same excuses presenting themselves, to-morrow, he will augment still further the quantity of his potations, and be one among the ‘fuddled’ or ‘royally (beastly?) drunk.’ One fit of this kind prepares for another, and so on until our *regular* young man, one who boasted that he could be *temperate* without the ascetic privation of *abstinence*, is in a few years a regular toper and half and half man, neither entirely drunk nor entirely sober from one week’s end to the other.

In illustration of the second kind of danger which we have indicated it may be safely affirmed on the strength of admitted experience in Great Britain and France, that beer drinking, in the first, and wine drinking in the latter of these countries, prepares the persons so indulging, respectively, for a love of gin and of brandy. Admitting then, for the moment, that the drinking of malt liquors and light wines is attended with no immediate bad effects, (whereas in fact these are numerous,) the practice places the persons indulging in it, in much greater peril of their healths and lives for the future, by the depraved appetite which it produces. Under similar circumstances in all other respects, the beer or wine drinker is in more danger of losing his health, and diminishing his usefulness, and forfeiting his character in society than the water drinker. We do not mean to affirm that the latter will be necessarily exempt from distressing bodily infirmities and the shock of evil passions; but we do affirm without fear of refutation, though not of contradiction, that he experiences these ills of mind and body in a more mitigated shape than he would do under a different regimen.

In a struggle between brewers and distillers for supplying the market, we in common with all friends of temperance, would wish success to the former—not on account of any positive good which results from the use of malt liquors, but because this is an evil less

than that of the consumption of distilled liquors. The excessive use as it is called, of malt liquors, is however, productive of as dire a tribe of maladies as would result from similar excess in ardent spirits. The habitual use of either is not called for by the wants of the animal economy.

If Temperance Societies and physicians should have their opinions invoked in this matter, it becomes them to preserve a neutrality.—They are not called upon by their *detestation* of ardent spirits to give their *approval* to the habitual drinking of malt liquors, even though labeled ‘good and sound.’ By the way, what security have we, that these latter shall be good and sound, or that they shall really deserve the name of *malt* liquors. The history of the beer trade in Great Britain is not very assuring on this head.

THE CHOLERA IN PARIS.

Although the cholera has happily disappeared from Philadelphia and in a great measure from the neighbouring cities, yet the fearful interest which the subject inspired cannot nor indeed ought not to be readily lost, either for the purposes of present instruction or of measures of future precaution. It does not come within the scope of this work to give detailed histories of the disease; but it is our intention, and it is in fact incumbent on us, to place from time to time before the public, such pertinent facts connected with its origin and progress in different cities, as shall serve to impress permanently on the minds of all, the advantages of correct principles of hygiene both public and private, as well as of wise government and social order, for the prevention of cholera and all devastating epidemic diseases.

We have at this time on our table, among numerous other works on Cholera, three in French on the disease, as it prevailed in Paris. One is controversial, and need not engage our attention at this time. From the other two: a memoir by Dr. Foy, and a report of the Royal Academy of Medicine, we shall make some gleanings of interest to the general reader.

“What is the country,” says Dr. Foy, “which shall be fortunate enough to be able to present an insurmountable barrier to the cholera-morbus? That one in which destitution shall give place to competency, excess to temperance, excessive labour to suitable rest; that one in which there cannot be found crowds of persons badly clothed, badly nourished, and poorly lodged, &c.; finally, the country in which the laws of hygiene are known and followed may to a certainty count on having few if any cases of cholera. So convinced am I of the truth of this opinion, which I had already advanced

in my memoir on the cholera in Poland, that I am almost certain, that if on the day after its appearance in Paris, it had been possible to have removed the poverty of the labouring and distressed classes, we should have seen the epidemic, if not completely extinguished and disappear, at least not extending beyond the premonitory symptoms."

The following are among the passages in the concluding summary of Dr. Foy's work:

"The cholera broke out in Paris between the 22d and 26th March (1832); the first patients were received into the *Hotel Dieu* on the 27th. Before this date some doubtful and scattered cases had been noticed in the city.

"From London the epidemic fell on Paris like a bomb; neither the cities nor towns adjacent to the frontiers of the kingdom, or intermediate between them and the capital had a case of epidemic cholera.

"The disease did not first break out in those quarters of Paris in which are the mails, stage coach offices, and hotels in which strangers arrive—it was in quite an opposite direction that it appeared.

"The cholera first attacked the most destitute individuals, and most commonly many persons in the same family were attacked at the same time.

"Physicians, students of medicine, sisters of charity, nurses of both sexes were not, in proportion to their numbers, greater sufferers from the disease than persons remote from the sick.

"From the first onset the cholera exhibited all the intensity and serious character of that which I witnessed at Warsaw. It was only at the expiration of ten or twelve days that the symptoms were of a somewhat mitigated nature.

"Most commonly the epidemic was manifested by premonitory symptoms; but at times it came on suddenly.

"A large majority of the population of the capital and of all the places in France in which the cholera prevailed, experienced in a greater or less degree the epidemic influence. This influence was scarcely observed at Warsaw. Shall we assign as a cause of this difference, the glorious although unfortunate Polish revolution which then occupied and excited the minds of all."

In reference to the locality of the disease in Paris, we learn from Dr. Foy—

"That the streets which suffered most were those situated near the *Hotel-de-Ville*, or on the left bank of the Seine, in the neighbourhood of the hospitals of the *Hotel Dieu* and *la Pitie*, in the ninth, tenth and eleventh arrondissements. Now, all these streets are inhabited by workmen who are crowded together in low rooms, without ventilation, and in which there prevails a most disgusting odour; they are filled with furnished rooms in which lodging is obtained for a night; and which are sinks of vice and poverty. What could be done against such causes as these of death? How restore health to organs so long enfeebled, altered in function, and without power of

reaction under a poison so violent as to destroy even a sound organization? If to this we add the varied emotions experienced by the people, those rumours of poisoning which so unhappily excited their passions, that general discouragement, that sad and profound prostration, that terror which followed and which was marked on the countenances of all, we can understand that without supernatural aid, medicine must be powerless."

The report of the Academy of Medicine is in the historical part coincident with the conclusions at which Dr. Foy arrived.

"But in taking note of the great body of facts, it was seen that more frequently there was only one person attacked in a family or in the same room. This was more particularly observable in the class of people in easy circumstances."

Among the prophylactic or preservative means against cholera, the Academy lays great emphasis on rigid temperance. Its language is the more remarkable, because if regard be paid to its import, all strong drinks are prohibited. It is as follows:

"We shall not be afraid, however to repeat how important it is to abstain from spirituous drinks and strong liquors; to carefully avoid loading the stomach with food, and to shun all causes of indigestion or even of difficult digestion. One ought, for good nutriment, to combine in suitable proportions animal with vegetable matters, and that in reference to former usage, localities and personal experience."

The advantages of a regular and quiet life are set forth by the Academy in its proclaiming the fact, that in the colleges, large boarding and private schools there was scarcely a case of cholera.

The preservative powers of camphor are pointedly denied. The least inconvenience from the use of this drug would, we are told by this learned body, be its having no effect. In larger doses it has been productive of much injury. On the same line as camphor, they place all vinegars and alcoholic tinctures, and all anti-choleric mixtures in general "which were a real tax levied on public credulity." Panaceas, vermifuges and port wine, would have found no favour with the French Academy of Medicine

INFLUENCE OF THE MOON ON PLANTS.

There is an impression very generally entertained among gardeners, especially in Europe, that the moon has a particular effect on plants, and this in certain months more than in others. The gardeners near Paris give the name of the *lune rousse* to the moon, which, beginning in April, becomes full either at the end of the month, or more generally in May. According to them the light of the moon, in those months, injures the shoots of plants, and, when the sky

is clear, the leaves and buds exposed to this light become red or brown, and are destroyed, though the thermometer in the atmosphere is several degrees above the freezing point. They confirm this observation, by remarking that, when the rays of the moon are arrested in consequence of the existence of clouds in the air, the plants are not then injured, although the temperature and other circumstances are the same.

M. Arago who has examined the fact, explains it by a reference to the observation of Dr. Wells, and the principles which he has established. This gentleman has shown that in a clear night, exposed bodies may frequently have their temperature reduced below that of the surrounding atmosphere, solely by the effect of radiation, the difference being as much as from six to ten or more degrees; but that this does not take place when the heavens are obscured. M. Arago then observes, that the temperature is often not more than from four to six degrees above the freezing point during the nights of April and May, and that when the night is clear, consequently when the moon is bright, the temperature of the leaves and buds may often be brought by radiation below the freezing point, whilst that of the air remains above it, and consequently an effect be produced, which, though not dependent upon, accompanies the brilliant, unobscured state of the moon—the absence of these injurious effects, when the moon is obscured, being, also, as perfectly accounted for by these principles, from the knowledge that the same clouds which obscure the moon, will prevent the radiation of heat from the plants. Hence, the observation of the gardener is correct as far as it goes, though the interpretation of its cause, which is generally given, is incorrect.

FEMALE INDUSTRY.

If we refer to the accounts which the ancients give concerning the manner in which women formerly spent their time, we shall find that in their estimation, at least, female industry was by no means a matter of indifference. Homer tells us of princesses, who although entrusted with the economy of their household and a variety of domestic concerns, nevertheless found time to make the clothing worn by their husbands and their families. He represents Andromache employed in works of embroidery. Helen, also, made rich tapestry, which she embroidered with her own hands. The famous Penelope and her loom are familiar to every reader. Theocritus, Terence, Virgil—in short every ancient author, as well sacred as profane, bears testimony of the active and industrious lives which the females

of their days, led; and even in the corrupt ages of Rome, Augustus is said, on the authority of Seutonius, to have worn no clothing but such as was made by his wife and her sisters.

It was likewise the custom, formerly, among our European ancestors, for women to employ themselves in useful works. Even among the highest of the nobility, females, were not content to amuse themselves for a few minutes in the day with the needle; but sitting in the midst of their maidens, they laboured stately for hours, at tasks, which would now be considered degrading to a fine lady. Many of the ancient halls in England possess complete sets of furniture and hangings worked under the immediate superintendence of some former lady of the mansion.

The Germans who for a longer period than almost any other nation retained the customs of their forefathers, cherished to a very late period in their females a love of useful industry. In all the courts of Germany, princesses constantly worked in the midst of their female attendants, and were never ashamed to take an active part in all the domestic concerns of their household—they would indeed blush to have been found idle. They had no idea that women have the shameful privilege of doing nothing, or of spending their time only in trifles—They claimed and made use of their true prerogative—and were of the opinion that the love of industry is a virtue which supports all others, and which does honour to their sex, however depressed or elevated may be its rank in society.

ILLUSTRATIONS OF PHRENOLOGY.*

Mr. Calvert, the intelligent editor of the work entitled *Illustrations of Phrenology, &c.** assigns the following appropriate reasons for his ushering it into public notice at this time:

“The rapid progress which the science has made, within a few years, in Europe; the strong advocacy lately given it in our own country in the medical profession; and the increasing and growing interest with which the subject is generally viewed among us, recommend the present as a suitable moment for issuing such a volume. The conviction the editor entertains of the vast importance of the Phrenological discoveries, and of the beneficial results to be produced by a diffusion of a knowledge of them, has entered largely into his motive to undertake the task.” The recent arrival of Dr. Spurzheim in this country, and the increased curiosity and philoso-

* Being a selection of Articles from the *Edinburgh Phrenological Journal*, and the *Transactions of the Edinburgh Phrenological Society*—with twenty-six wood cuts—Edited by George H. Calvert, with an introduction by the Editor. Baltimore: William & Joseph Neal, 1832. p. 192. 12mo.

phical interest in Phrenology, which the lectures of that distinguished man never fail to impart wherever he goes, render the appearance of this little work still more opportune. Mr. Calvert, has executed the task which he proposed to himself, with judgment and ability. Our only regret is, that he does not address the reader more frequently in his own words—knowing as we do, that his zeal does not outstrip his knowledge of the subject, nor his ability to set it forth in the most instructive manner.

But we think we hear many of our readers, and they by no means unlearned, exclaim—What is this Phrenology about which we hear from time to time? The question shall be answered with becoming brevity.

Phrenology is derived from two Greek words signifying mind and discourse. The title might be adopted by any sect of philosophers, who make the attributes of the mind their study. It is now, however, understood to signify that system which admits that the mind is not an unit, displaying its powers alike on all subjects, in proportion to the attention and labour exercised on them; but that it consists of many faculties possessing very distinct and separate modes of action. These faculties are innate—that is, the predisposition to particular feelings and trains of thought and reasoning are innate. There is no necessary dependence between them, at least to such a degree that one tendency is to furnish evidence of the possession of another tendency or predisposition. Quickness of temper, for instance, or a tendency to resent with violence real or fancied wrong, gives no measure of firmness of character—nor does it imply either the presence or absence of benevolence. Between the passions, as they are commonly called, and the intellect, there can be no admitted relation nor proportion. Nor is there any such proportion between the activity of the faculties merely intellectual. A genius for music is innate, and often hereditary; but it does not imply a genius for painting, nor either of these for poetry, or for mathematics.

All these positions are undeniable—sustained as they are by the entire history of man, and illustrated by every day's observation. But yet, despite of the facts thus staring them in the face, metaphysicians almost invariably speak of the mind as an unit power, or at the most, displaying itself by a few faculties, which are in fact merely modes of activity of a faculty—such as memory, imagination and judgment. Pedagogues act on the false creed of the metaphysicians, and apply the same rules of education, give the same tasks to their young pupils, without regard to the contradictory nature or at least exceedingly different degrees of activity of their faculties.

Phrenology, by admitting the innate peculiarities of mind and the plurality and separate offices of its faculties, takes cognizance of human nature as it really is—but not as it is exhibited by the schoolmen and metaphysicians. In education it assumes the neces-

sity of appealing to the different faculties, by means and agencies adapted to each, and does not attempt to force one or a class of faculties by the laws which are found to govern another class. Thus the feelings are to be appealed to through the feelings; and roused or checked by means calculated to act directly on them. They are not to be schooled into subjection by mere reasoning. Strength of intellect does not give a pledge of morality. This last depends on a right government of the feelings—a government obtained often over themselves by men of comparatively weak intellects; whilst all history shows that the most ingenious sophist or acute dialectician, is far from being either the most benevolent or the most just and upright man.

So far Phrenology may be considered a philosophical deduction from the known and appreciable phenomena of mind, as evinced in the actions of men. But physiologically and philosophically, the study cannot stop at this point. It is now well ascertained, that every action or function performed by man, as a living and sentient and intellectual being, is by means of an appropriate mechanism or organ, as it is more generally termed. Locomotion is performed by means of the muscles and bones variously arranged and jointed. Vision requires the eye: hearing the ear: the circulation of the blood is performed by a heart and a series of tubes or blood vessels variously designated. Mind, the abstract idea of power of thought, sentiment and passion—composed in fact as we have just seen of many faculties, ought also to have its material organ or series of organs.

The brain is the part which makes up these organs, and on the development and due proportion of which, depend the performance of the faculties of the mind. But if there be a plurality of these latter, and if their operation be different and in a measure distinct, there ought we should suppose be a plurality of organs of the brain; that is to say, for each faculty there ought to be an allotment of a particular part of the brain. The two propositions are essentially connected; and it is this connexion which constitutes the system of Phrenology, as first taught and explained by Gall, and since further confirmed and illustrated by his coadjutor Spurzheim.

To the question how the correspondence between the fulness and size of particular parts of the brain, and the energetic display of particular faculties has been ascertained, we reply, by observation and experiment. The brain, as a whole, being the apparatus by which the mind, as a whole, displays itself, it might have been inferred, that the larger the former compatible with health, the more forcible and vigorous would be the latter. As a corollary from this, the larger a particular portion of the brain is, the more active would be the faculty or class of faculties depending on it for their performance. Hence size must be regarded relatively to the part or region of the brain, as indicative of mental power. If the growth is mainly in one direction, as for instance behind a line which should be drawn from one ear to the another, passing over the summit of

the head, a very different display of mind will prevail from that which would result from a large development before this line, or in the anterior and upper part of the brain. This and other differences of mental display corresponding with differences of development of brain, are facts clearly ascertained and which may be readily confirmed by any person who chooses to take the trouble to observe for himself.

But while we speak thus familiarly of growth and development of brain, our readers may ask how we can ascertain this actual and relative size of a part hidden from the eye and inclosed in a hard bony case. We reply that the case or scull which contains the mass called brain, takes its form and outline from the former. The softer body in its growth modifies the figure of the harder: the superficies of the brain is complete before the scull, as we see in early infancy. The growth of the first precedes the increased capacity of the second; and when as in dropsy of the brain this part becomes preternaturally distended, sometimes acquiring an enormous size, it causes a corresponding enlargement of the scull or bony case. The scalp covers closely and uniformly the scull. Hence, when in a living subject, we run our hand over the head, feeling prominences and depressions, we may be pretty well assured that there is corresponding fulness or deficiency of substance of the brain beneath.

It is to this part of the science—an examination of the outward form of the head, with reference to the absolute and comparative roundness and fulness of its several regions, as a measure of the size of the brain beneath and of the energy of the corresponding faculties that the terms *Craniology*, and *Cranioscopy* are frequently applied.

PHRENOLOGY then teaches, and consists in, a belief of there being a plurality of faculties of the mind; of these faculties being innate and often hereditary, and independent of each other in their manner of action and educability; and also that they depend, as a whole, for their performance, on the entire mass of the brain, and for that of each faculty on a particular portion of the brain, the size of which at the surface can be measured with tolerable accuracy, by the size of that part of the scull immediately above it.

For proofs of these several truths, and examples of the successful application of the science of Phrenology, to explaining the contradictions in human nature and to acquiring a knowledge of individual character, we can confidently refer to the work of Mr. Calvert. The accounts of Dr. Gall's visit to the prisons of Berlin and Spandau, and Mr. Combe's to Dublin, are full of interest to all who desire to make the penal code conform with justice to society, and due seclusion and punishment of criminals. In the Phrenological observations also on the cerebral developments of Williams and Bishop, and on Burk, murderers, the reader will see the superiority of this mode, in analysing character and elucidating much of what in all other systems of mental philosophy seems so obscure.

The Olympic Games were among the most important of the Grecian institutions. The preparatory discipline to which the youth were obliged to submit, who were ambitious to win the laurels, injured their bodies to hardship, while the generous rivalry that pervaded their competition expanded the soul.

“The youth who strives the Olympic prize to gain,
All arts must try, and every toil sustain.”

By these games, a noble band of youth was trained to become the ornament and protection of their country. When the clarion of war resounded through the states, they were active and alert to display the boldest exercises of courage; or in the popular assembly, their commanding eloquence tilled the angry tumults of an infatuated multitude.

But these were not the only advantages which resulted from the Olympic Games. Greece was divided into many states, which differed in their internal policy, in their language and in their habits. When threatened with invasion, it was necessary that they should all unite in the common defence. As the games constituted a religious festival, which every Greek considered it a duty as well as a privilege to attend, men from the most remote provinces were assembled; and the worship of a common divinity was of admirable effect in producing a harmony of disposition, and in moulding to a common standard their dissimilar manners and various dialects.—Men of knowledge imparted to each other the result of their studies, and soldiers organized systems of defence against the hour of danger. The weaker states solicited and obtained the protection of the stronger; and the emulation of the young was stimulated by the distinction and applause conferred upon the eminent and successful.

Gui Patin.—This learned and celebrated physician used to call *liqueurs* and sweet drams by the very appropriate name of “*Les poisons sucrés*” sugared poisons.

He used to say, that the only use of anger is to spoil every thing, and that one day Minerva, the goddess of Eloquence and Rhetoric, having put herself into a passion, was guilty of a solecism in discourse.

He remarked, after Lucian, that when the gods hated any one, they made him a schoolmaster, and that to be reduced to teach the ignorant was like the ancient punishment of being condemned *ad bestias*, to be thrown to wild beasts.

Of the art of medicine as practised by his contemporaries, he said, and with great truth, that it was the art of divination.

Empirics and quacks, and all who exercised the art of medicine without skill and with great profit, he termed the Hawks of the faculty.

Old age, he observed, is a very great lady indeed, for she can never make a visit without bringing with her a numerous retinue of attendants.

His great hatred to the English nation, which he took every opportunity of displaying, was produced in his mind from their having made away with one of their kings, and from their administering antimonial wine in fevers.

Among the recent institutions of this city, we observe a Riding School, under the direction of Messrs. Roper and Blyth. Arrangements have been made there for giving instructions to both ladies and gentlemen, at suitable, but separate, hours, in an art alike conducive to health and graceful carriage. It is one, moreover, which gives amusement and recreation, and to which the most ascetic and self-denying can find no reasonable objection. We hope to hear that the school is much and regularly frequented by the youth of both sexes.

CIVILIZATION—BARBARISM.

One might almost question, with Rousseau, the advantages of civilization, if they are not evidenced both in improvement of the intellect and better regulation of the feelings. But where a knowledge of the right is constantly in opposition to the practice of the wrong, where vanity leads to the most absurd fashions and sacrifice of personal comfort, one may reasonably doubt of a people meriting the praise of being civilized. In this respect the European and Anglo-American have not much to boast of, over the Ashantees of Africa or the Indians of the Columbia River. It is not easy to say on which side the greatest absurdities of vanity are practised; by them who compress the brain and cause *flat-heads*, or by others, as among us, who compress the lungs and cause flat-chests. In apparent monstrosity or disfiguration of the human form divine, corseting, by which the body of a female is made to resemble an hour glass, or to remind one of a wasp, without, be it always understood, its sting; the civilized Europeans and Americans, are mid-way between the Chinese with their wise proverbs, paternal discipline, universal corruption, and small feet,—and the Indians of the Columbia River with their savageness, their thievery and flat heads. But in point of great and permanent injury to the human frame, and loss of health and abbreviation of life, the practice of corseting,

the fashion among the *refined*, the *highly* civilized is infinitely worse and more truly cruel than the bandaging of the feet or compressing of the head.

We subjoin here an account of the process by which the Indians at the mouth of the Columbia River acquire the distinguishing mark of flat-heads. It is related by Cox, in his highly interesting narrative of Adventures on the Columbia River.

"Immediately after birth, the infant is placed in a kind of oblong cradle formed like a trough, with moss under it. One end, on which the head reposes, is more elevated than the rest. A padding is then placed on the forehead, with a piece of cedar-bark over it, and by means of cords passed through small holes on each side of the cradle, the padding is pressed against the head. It is kept in this manner upwards of a year, and is not, I believe, attended with much pain. The appearance of the infant, however, while in this state of compression, is frightful, and its little black eyes, forced out by the tightness of the bandages, resemble those of a mouse choked in a trap. When released from this inhuman process, the head is perfectly flattened, and the upper part of it seldom exceeds an inch in thickness. It never afterward recovers its rotundity. They deem this an essential point of beauty, and the most devoted adherent of our first Charles never entertained a stronger aversion to a *Round-head* than these savages.*

"They allege, as an excuse for this custom, that all their slaves have round heads; and accordingly every child of a bondsman, who is not adopted by the tribe, inherits not only his father's degradation, but his parental rotundity of cranium.

"This deformity is unredeemed by any peculiar beauty either in features or person. The height of the men varies from five feet to five feet six inches; that of the women is generally six or eight inches less. The nose is rather flat, with distended nostrils; and a mouth, seldom closed, exposes to view an abominable set of short, dirty, irregular teeth. The limbs of the men are in general well shaped; but the women, owing to tight ligatures which they wear on the lower part of their legs, are quite bandy, with thick ankles, and broad flat feet."

We entreat those mothers who allow of and even directly encourage their daughters, who have hardly yet passed the period of childhood, to tight lacing and compressing of their waists, so as to prevent the suitable expansion of the chest, to ask themselves, whether they are a whit more rational than the Indians of Columbia River, or whether their chief motive be not as weak and unworthy a one as that assigned by these people, viz: to make a

* Doctor Swan, on examining the skulls I had taken, candidly confessed that nothing short of ocular demonstration could have convinced him of that possibility of moulding the human head into such a form."

marked distinction between their children and those of their inferiors.

In another respect, the comparison between the savage and the civilized, will not be to the advantage of the latter. We advert now to the opinions held respecting the effects of ardent spirits. Among us, we every now and then hear men, called wise and learned, advocating the use of these liquors. Let them hear what the untutored savage thinks on the subject.

“All the Indians on the Columbia entertain a strong aversion to ardent spirits, which they regard as poison. They allege that slaves only drink to excess; and that drunkenness is degrading to free men. On one occasion some of the gentlemen at Fort George induced a son of Comcomly the chief to drink a few glasses of rum. Intoxication quickly followed, accompanied by sickness; in which condition he returned home to his father’s house, and for a couple of days remained in a state of stupor. The old chief subsequently reproached the people at the fort for having degraded his son by making him drink, and thereby exposing him to the laughter of his slaves.

In one other particular we do not find that there is much difference between the Indians, and the inhabitants of Paris, London or Philadelphia. The credulity of all is nearly the same, as well as their dislike to be undeceived; and “the strong man of medicine” is not more than equalled by the maker of the Rob, or the Balm of Gilead, or the Panacea. Mr. Cox thus describes Indian quackery.

“Every Indian village has its quack doctor; or, as they call him, ‘the strong man of medicine.’ The moment a native is attacked with sickness, no matter of what description, the physician is sent for. He immediately commences operations by stretching the patient on his back; while a number of his friends and relations surround him, each carrying a long and a short stick, with which they beat time to a mournful air which the doctor chaunts, and in which they join at intervals. Sometimes a slave is despatched to the roof of the house, which he belabours most energetically with his drumsticks, joining at the same time with a loud voice the chorus inside. The man of medicine then kneels, and presses with all his force his two fists on the patient’s stomach. The unfortunate man, tortured with the pain produced by this violent operation, utters the most piercing cries; but his voice is drowned by the doctor and the bystanders, who chant loud and louder still the mighty ‘song of medicine.’

“At the end of each stanza the operator seizes the patient’s hands, which he joins together and blows on. He thus continues alternately pressing and blowing until a small white stone, which he had previously placed in the patient’s mouth, is forced out. This he exhibits with a triumphant air to the man’s relations; and and with all the confidence and pomposity of modern quackery, as-

ures them the disease is destroyed, and that the patient must undoubtedly recover. Mr. Franchere states he has seen some of them carefully envelop the small stone, which they call the source of evil, in a piece of cedar bark, and throw it into the fire.

"It frequently happens that a man, who might have been cured by a simple dose of medicine, is by this abominable system destroyed; but whether recovery or death be the consequence, the quack is equally recompensed. Some of the more intelligent undoubtedly perceive the imposition which these fellows practice; but the great faith which the ignorant and superstitious multitude have in their skill deters any man from exposing their knavery."

POLITICS.

Removed, as well by professional pursuits as by taste, from the temptation of playing the part of political partisans, we are still not without sympathy and respect for those of our readers and a large body of the reading public who are in this situation. In local or state, and national politics, every citizen has to a certain extent, a direct or personal interest. They involve questions of great moment, not only at the present juncture but for after times: and according to the success of the people in arriving at the truth and separating it from plausible but dangerous sophisms, will be the probabilities of continued prosperity for the commonwealth. The remarks of Coleridge on the movements of men in general, will apply to their progress and duty as politicians. "If we hope," says this original writer, "to instruct others, we should familiarise our own minds to some fixed and determinate principles of action. The world is a vast labyrinth, in which almost every one is running a different way, and almost every one manifesting hatred to those who do not run the same way. A few indeed stand motionless, and not seeking to lead themselves or others out of the maze, laugh at the failures of their brethren. Yet with little reason; for more grossly than the most bewildered wanderer does *he* err, who never aims to go right. It is more honorable to the head, as well as to the heart, to be misled by our eagerness in the pursuit of truth, than to be safe from blundering by contempt of it." The happiness of mankind is the *end* of virtue, and truth is the knowledge of the *means*, which he will never seriously attempt to discover, who has not habitually interested himself in the welfare of others."

But while thus admitting that it is the duty of every citizen to exercise his right of free and diligent inquiry into public measures, and the abilities of those who offer themselves as national guides and counsellors, it by no means follows that this should be his daily occupation. He is not called upon to debate every question of a public nature at the corners of streets, or in the highways, nor to be haranguing on every court day, nor vociferating his opinions in taverns and other places of occasional convivial resort. Some may feel themselves called on by a sense of duty, and from a fear

of misconception of their sentiments, to address the public through the daily press: but a very large majority of the people may well content themselves with the expression of their deliberate conviction by their votes, at the day of election of their representatives and chief magistrates. In selecting these personages, they are not required by the widest latitude of republicanism, to suppose that "the commonest human intellect suffices for a perfect insight into the whole scene of civil policy, and qualifies the possessor to sit in judgment on the constitution and administration of his own country and of all other nations." According to this misleading creed—one which by the way is too generally the one of political faith—"to be a musician, an orator, a painter, a poet, an architect, or even to be a good mechanist, presupposes genius, to be an excellent citizen or mechanic requires more than an average degree of *Talent*; but to be a legislator requires nothing but *common sense*." It unfortunately happens that claim is often laid to the possession of this last attribute, with a vehemence in the inverse proportion of a notorious deficiency of both talents and attainments; and he is extolled as a good practical man, an efficient legislator, one who will not be led away by theories, merely because he has uniformly shown himself to be incapable of lofty thoughts and powers of general reasoning.

Good Advice.—In place of talking politics, and complaining of the hardness of the times, one had better work—work drives away want, and economy prevents its return.

There is no greater burden than that which a man imposes on himself by idleness and dissipation.

Never trust to the nostrums of quacks—they are so many poisoners, who, while receiving your money laugh in their sleeve at your credulity.

If you have the tooth-ache, go and see a dentist—and if you wish to avoid indigestion, live soberly.

Avoid law-suits.—The best cause is, for the party concerned, a bad one. Justice is not rendered gratis in this world—so that although it costs a man a great deal who is in the wrong, it makes him also pay up roundly enough who is in the right.

Be not ashamed of your calling—all vocations are honourable, which are useful and followed with probity. No vocation dishonours a man, although by his misconduct he may bring disgrace on it.

Tobacco no security from Cholera.—M. Chevalier proved, from documents, that the assertion made on a former evening, that tobacco was a preservative against cholera, was erroneous. He stated that twenty-seven mechanics employed in the tobacco manufactory had died of the disease.

Prussic Acid a Poison to Vegetables.—The sensitive plant, when exposed to the vapour of prussic acid, instantly closes its leaves. The same plant, as well as other tender plants, such as the garden pea and kidney bean, when subject to the influence of this acid, quickly wither and die, and the laurel-water has the same effect upon them. It appears also that plants which naturally contain the acid, such as the cherry-laurel and almond tree, are not less susceptible of its poisonous action than others. Seeds, steeped for some time in the acid, lose their power of germination.

ARTS AND ARTISTS.

Architecture as a Science.—As a science, then beyond the rules necessarily imposed by the leading intention of durability, we detect, says Meemes, nothing in the architecture of Egypt like the universal harmony given to it in Greece. The same is the character of Indian art, with still more of incongruous union; for here the massive simplicity of the original, or at least earliest source, for so we have already shown Egyptian art to be, is broken down and loaded with frittered and pretending ornament. Syria, or the vast district lying between, furnishes nothing beyond conjecture, or rather in the only instance, that of Solomon's labours, where we attain some information on which implicit reliance may be placed—clear manifestations are discovered of mixed art, in which that of Egypt predominated. Thus, in the whole of the ancient world, about a thousand years before our present era, when the Greeks first, or soon after, began to erect temples, there existed no science complete in itself, or whose principles even had been elicited from the chaotic mass of materials, by which they could have been directed, in their own matchless monuments. Whatever of grace and of beauty—of dignity and truth—of sublimity and harmonious proportion,—whatever of architectonic excellence, grounded on the most profound principles of taste, and established on the sure basis of geometry,—whatever of all this can be discovered in the building of Greece, she owes it to the superiority of native genius. Yet the obligations to Egyptian predecessors were neither few nor unimportant. The rectangular area, in which the breadth should bear a proportion less to the length, a shape of all others best adapted to beauty and convenience, was introduced. A still less obvious source of almost every higher beauty in the science—columnar architecture—was there practised so early, that whether it originated in the country, or was introduced, is unknown. Even the system of ornament may, in its rise at least, be traced in these primeval remains; for not a single detail afterwards introduced may not, in a rudimental, often nearly perfected state, be remarked; especially the beautiful idea of floral ornaments. Lastly, in the works of Egyptian art, very perfect examples of mechanical practice, both in dressing and laying the materials, might be observed in almost every instance. All these elements, however, the last excepted, jarring among themselves, whether as wholes or

parts, were to be selected, arranged, methodized, and animated by grace, harmony, nobleness,—in short, the science of architecture was yet to be created.

Imitation without Invention.—There is a painter in Naples, or at least there was one a few years back, named *Ciappa*. This man's talent consists in copying the paintings of the old masters, with such accuracy that the copy cannot be distinguished from the original, even when they are both together. He turns his ability in this way to good account—passing off, as we have been told, his copies for the celebrated originals. It is worthy of remark, however, that skilful as *Ciappa* is in copying, he has never, of himself been able to compose nor execute an original piece, or one of his own invention, in the least above mediocrity.

DOUGHTY'S CABINET OF NATURAL HISTORY AND AMERICAN RURAL SPORTS—*With Illustrations.* We have received the sixth number of the second volume of this instructive and amusing work, which combines more popular instruction on Natural History, with ornamental illustrations, than any other of the same price, of which we have any knowledge. On the same terms of a daily newspaper, or *eight dollars* a year, a person can have a volume of this work of Doughty's, consisting of 13 numbers or 300 pages 4to, fitted either to take a place on a ladies table or on the shelf of a library of a man of science.—The coloured engravings, two to each number, or twenty-six at the expiration of the year, are equivalent to the subscription price of the volume. Those of the last or sixth number, are of the *Eggs* of *twenty-five* different birds, and of the *Scarlet Tanager* and *Blue Eyed Warbler*. We can hardly conceive of any gentleman, who looks at all to the augmentation of his library or to the rational amusement of his family, failing to subscribe to this work

THE PHILANTHROPIST.—This is the title of a new weekly paper, the first number of which was issued on the 17th October, in this city. It is published by Messrs Clark and Walter, 220 north Third street, at *two dollars* per annum. The subjects which will occupy the chief space in the columns of the PHILANTHROPIST, are *Education, Sound Morals and Temperance*, together with a summary of the *News* of the week. It is proposed to make the literary selections of such a cast that they shall combine instruction with amusement, and contribute to give to the PHILANTHROPIST the character of a pleasant family paper.

*** We have not been able, for want of space, to notice in this number a useful little work by *Belinaye, on Hygiene*; nor *Dr. Caldwell's* very valuable Essay on *Intemperance*. We had marked for extracts—some interesting passages in the XV. Vol. of the Library of Entertaining knowledge, on *Vegetable Substances used for the Food of Man*; and in more than one of the Biographies of distinguished men—now on our table; all of which though postponed insertion, for the reason just stated, shall appear in due season, interspersed with the usual proportion of original hygienic and miscellaneous matter.

FOR SALE AT THIS OFFICE.—Gazetteer of North America, Journal of Health, 3 volumes, bound; Casket, 5 vols. bound; Catechism of American Law; Catechism of Health; Kaleidoscope; Class Books; Interest Tables; Testaments, &c. &c.—Together with a variety of superior Steel, Copper-plate and Wood Engravings, in small or large quantities.

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RECREATION.

Health—the poor man's riches, the rich man's bliss.

"As much as in thee lies, live at heart's ease."

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OF SIGHT.

Of all our external senses "those tutors of the mind," sight is unquestionably the noblest and most important. It constitutes the connecting link, as it were, between man and the residue of creation. The rays of light, which minister to this sense, and concerning which, without it, we could never have formed the least conception, are among the most astonishing and wonderful of nature's works. Of this we must be convinced when we consider their extreme minuteness, their inconceivable velocity, the regular variety of colours which they exhibit, the invariable laws according to which they are acted upon by other bodies, in their reflection, inflection and refraction, without the least change in their original properties; the facility with which they pervade bodies of great density, and thickness, without crowding or disturbing one another, and without giving the least sensible impulse to even the lightest substances; together with the powerful influence they exert upon all organized beings.

The structure of the eye, too, with all its appurtenances, by which the light is made to convey intelligence to the mind; the admirable contrivances by which it is enabled to perform all its various movements, and the variety in the eyes of different animals, suited to their several natures, wants and modes of life, are all convincing evidences of the infinite wisdom and benevolence of the Creator.

If we could suppose an order of beings endued with every human faculty but that of sight, how incredible would it appear to such beings, accustomed only to the slow informations of touch, that by the addition of an organ, consisting of a ball and socket of an inch diameter, they might be enabled in an moment of time, without changing their place, to perceive the disposition of a whole army, or the order of a battle, the figure of a magnificent palace, or all

the variety of a landscape? If a man were obliged by feeling alone, without the aid of sight, to find out the figure of the peake of Teneriffe, or of St. Peter's at Rome, it would be the work of a life-time, and even then but imperfectly accomplished; but with the eye, it may be effected perfectly in almost an instant. It would appear still more incredible to such beings, if they were informed of the discoveries which may be made by this little organ in relation to things far beyond the reach of any other sense: that by means of it we can find our way over the trackless deep; traverse the surface of the globe, determine its figure and dimensions, and delineate its various regions: that we can even measure the planetary orbs, and push our discoveries into the sphere of the fixed stars. Would it not appear still more astonishing to such beings, if they should be further informed, that by means of this same organ, man can communicate with man, though separated by thousands of miles, and pour out to him all his thoughts as readily as though he were to converse with him face to face? That by the eye, he can perceive the tempers and dispositions, the passions and affections of his fellow creatures, often too, when they most desire to conceal them? That when the tongue is taught most artfully to lie and to dissemble, the hypocrisy is clearly painted on the countenance, to the discerning eye.

It is not to be presumed however that the blind, even from their birth are incapable of acquiring a knowledge of any science, even those most intimately dependent for their very existence upon the sense of vision. They may even make discoveries in almost every branch of philosophy. They may be made to understand as much almost as any other man, not only of what relates to the order, distances and motions of the heavenly bodies; but of the nature of light, and of the laws of the refraction and reflection of its rays. They may understand distinctly how those laws produce the phenomena of the rainbow, the camera obscura, and the magic lantern, and all the powers of the microscope and telescope. This is a fact sufficiently attested by experience. But still all this knowledge owes its existence, to the organ of sight alone. It is by the eye that the information was first acquired, though it is capable of being communicated to the blind through the medium of the remaining senses, which by constant use have acquired a delicacy and acuteness, that they seldom attain in those who are aided in their investigations by the sight. Every thing that enters into our mind by the eye, may enter into theirs by the ear, aided by the touch. Though the blind could never, if left to themselves, have dreamed of such a thing as light, yet they may be instructed in all we know concerning it. They would never, if left to themselves, have found out that there are such bodies as the sun, and moon, and stars; yet they may be taught all the noble discoveries which astronomers have made concerning their motions, and the laws of nature by which they are regulated.

AN EASTERN FABLE.

ABOUL HAMED was the only son of a wealthy merchant, at Ormus, and on his father's death possessed all his treasures. Every thing that riches could bestow was within his power; but he found that there were still blessings which riches could not procure; long life was not to be purchased with gold; perhaps for that very reason he the more earnestly wished for it. The desire became strongly impressed upon his mind; it was his last thought on going to rest—the first when he awoke. When once the spirits of man are strongly moved, they continue the agitation without a fresh effort; it was natural that his night visions should be sometimes on the subject which had engaged his waking thoughts. One of these dreams appeared to him to be a revelation in reference to what he so earnestly wished to obtain. His guardian angel bade him depart for Benares, where he would find in the observatory a Brahmin, near the great Quadrant, who would inform him how to lengthen his life. The imagination of Hamed dwelt with so much delight on this injunction, that he conceived it to be repeated again and again, and that to delay his journey would be criminal. After the usual time, he arrived safely at Benares, and took the earliest opportunity of visiting the observatory. Finding the Brahmin in the place announced in his dreams, he accosted him thus—"Venerable sage, need I acquaint thee with the cause which has brought me to this holy city?"—"It is needless!" replied the Brahmin—"Why dost thou desire length of days? Is it to perfect thyself in knowledge and in virtue? Hast thou entered upon a course of studies which the angel of death may prevent thy finishing, or commenced works of benevolence which the usual limits of human life are too short for bringing to perfection?" Hamed confessed, with blushes, that he desired long life solely to enjoy his riches.—"Alas!" said the Brahmin, "what enjoyment of riches is there when old age has destroyed our appetites and blunted our desires? Thy wish should have been for perpetual youth, and then the desire to enjoy thy riches would have been rational. Know, stranger, that before thy heart had begun to beat, the number of its pulsations was determined. No art, nor earthly power, can add one to the sum—but it depends on thyself whether they shall be exhausted sooner or later. At the beginning of things, when Brahma was appointed to create man, he determined on the number of pulsations proper for the longest time his children of the earth should survive; of these pulsations it was ordered that only a certain number should be expended daily. If, instead of this allowance, thou wilt force thy heart to vibrate twice as often, although thy destiny be not changed, thou livest but half thy appointed time. By a life of reason, of virtue, and of temperance, the last stroke is long delayed—and old age is late in appearing; but, by wasting thy spirits in folly, in riot, and in luxury, thy hair soon becometh gray—thy back early bowed—and the determined number of thy pulsations are quickly accomplished. Remove the balance from the

machine with which Europeans measure time, and the wheels will hurry through their proper revolution of thirty hours in a few seconds. Immense should thy possessions be to afford the daily expenditure of one million of the smallest of our coins. One day's income is too great to be lost; of how much more consequence is this sum if applied to time, which is invaluable? In the dissipation of worldly treasure, the frugality of the future may balance the extravagance of the past, but who can say—'I will take from my minutes to-morrow to compensate for those I have lost to day? Thou desirest long life—are there not many hours in every day which pass unimproved, unemployed, and even unnoticed? Use these first, before thou demandest more. If we waste our time, our talents, and our strength, instead of improving them, what right have we to complain of wanting that—of which we already possess more than we use?'

Hamed, making his salaam to the Brahmin, departed—and like his fellow mortals, felt all the inferiority of being instructed, without the benefit of instruction; for he still continued to wish for life, and still continued to squander it away.

A SKETCH OF THE CLIMATE OF THE VALLEY OF THE MISSISSIPPI.—BY DANIEL DRAKE, M. D.

(*Concluded.*)

Let us recur to the winds, the great modifiers of climate in every country. I have already referred to the greater prevalence of S. W. winds in the interior—of N. E. and N. W. winds in the maritime states. Not having at hand the materials for an extended comparison, I shall insert a tabular view of observations made at Cincinnati, for six succeeding years, with so few omissions, that they amount to 4209. They have been brought to the eight principal points of the compass; and while they show the relative prevalence of different winds in the successive months of the year, will furnish data for comparisons between the Western and Eastern states, by those who reside and observe in the latter.

OBSERVATIONS.

	S. E.	S.	S. W.	N. E.	N.	N. W.	E.	W.	Calm.
January	6	2	13	8	1	21	3	6	6
February	5	1	13	8	1	14	0	5	8
March	10	1	16	11	1	10	0	5	4
April	7	0	24	10	1	8	1	3	5
May	7	1	19	10	0	10	1	4	6
June	9	1	23	12	5	7	1	2	3
July	6	1	19	11	2	11	1	4	4
Augu	6	1	23	10	1	12	1	1	6
September	6	1	23	9	0	8	2	3	3
October	9	1	24	6	1	10	2	4	3
November	9	3	13	6	1	10	2	7	5
December	7	1	11	5	0	15	2	6	9
	87	14	221	106	14	136	16	50	62

From this table it appears, 1. That the different winds of Cincinnati prevail in the following order: south-west—north-west—north-east—south-east—west, east—south and north. 2. That the south-west is the prevailing wind, nine months out of the twelve, viz: from March to November, inclusively. 3. That the N. W. wind prevails in January, December and February. 4. That the greatest number of calm days are in December and February; the least in June, September and October; which are equal. 5. That the south are to the northern winds, as 322 to 256; or about 40 to 32. 6. That the western are the prevailing winds throughout the whole year, being to the eastern as 407 to 200, or nearly 4 to 2. 7. That the west wind blows only half as much in the six warmer, as in the six colder months. 8. That the east, south, and north winds are nearly equal.

Most of these deductions are exhibited by the following table, in which the whole number of observations, stated above, are supposed to be represented by 1000, and the subsequent numbers to be its fractional parts.

Mean of 6 years observations—1000, of which the

South-east make	-	-	-	-	122
South, -	-	-	-	-	19
South-west, -	-	-	-	-	313
Southern	-	-	-	-	454
North-west, -	-	-	-	-	192
North, -	-	-	-	-	19
North-east, -	-	-	-	-	150
Northern, -	-	-	-	-	361
East, -	-	-	-	-	22
Eastern, -	-	-	-	-	294
West, -	-	-	-	-	70
Western, -	-	-	-	-	575
Calm, -	-	-	-	-	87

A brief sketch of the character of the principal winds embraced in the tables may be useful to those who purpose to emigrate to the West.

1. *The South-West.* This wind, which, as we have just seen, prevails on the Ohio three-fourths of the year, exhibits two different characters, or is divisible into two varieties—the *humid* and the *arid*. The former of these is characterized by prevailing throughout the night; by generally continuing two or three days after its commencement; by alternating with the north-east wind, by sinking the barometer more than any other aerial current; and by always causing clouds and generally rain, which is often profuse. The arid south-west commences between sunrise and 10 o'clock in the morning. It is at first very gentle, and increases in force with the progress of the day, until 4 or 5 o'clock in the evening, when it begins to subside. About sunset it ceases, and the succeeding night is clear and serene. This is the predominant wind in the hottest and driest weather, with which indeed it is identified in the

mind of every observer in the west. Its prevalence, in comparison with the other variety, is, perhaps, as eight or ten to one. It is seldom attended with an atmosphere altogether cloudless, but never produces any other form of rain than a thunder-shower. It sinks the barometer less than the humid south-west, but raises the thermometer higher than any other wind. It is not known whether at present it prevails more or less than at the first settlement of the western states.

2. *The North-west.* This wind, like that already described, exhibits two varieties, one of which occurs in warm, the other in cool weather. A state of calmness or the dry south-west, generally precedes and follows the former of these varieties. It is the gale which attends thunder-storms, and of course commences to the windward. Its duration is transient, seldom continuing longer than a few hours; and its geographical extent is equally limited. The other, which is the principal variety of north-west wind, begins, it is well known to the leeward; it generally succeeds rain, and may be regarded as the harbinger of fair weather. In spring and autumn, however, it is frequently attended with moderate showers, which seldom continue more than a day; and in winter it produces snows, that are sometimes among the deepest that fall in the Valley of the Mississippi.

In common it does not exhibit any nocturnal intermission, though for the most part it blows with less violence at night than in the day. It is generally followed by a calm, which is succeeded by the south-east or south-west wind. It frequently undergoes a change into the north-east, blowing from every intermediate point of the compass. On the barometer and thermometer it produces effects opposite to those of the south-west wind. The greatest elevation of the former, and depression of the latter of these instruments, hitherto observed at this place, were during the prevalence of this wind. The longer it continues, the lower is its temperature; and when it is not too much reduced, it feels as pleasant as it is uniformly pure and invigorating.

3. *The North-East.* This current by ascending the St. Lawrence, may reach Cincinnati without passing over the Alleghanies; but it generally traverses those mountains, and deposits on them, as already stated, a part of its humidity, as appears from its seldom producing much rain or snow along the Ohio. Except, however, when it succeeds to the moist south-west, and follows a storm, this wind constantly produces one of those, or at least cloudy weather. In temperature and weight, it holds a medium between south-west and north-west. It sometimes continues to blow for a week after a south-west storm, during which the sky will perhaps be nearly clear. It is invariably moist, and produces in all exposed to it, the sensation termed *rawness*; though in a much less degree than in the Atlantic states.

4. *The South-East.* This partakes much of the character of the humid south-west, for it raises the thermometer and sinks the barometer in a moderate degree. It is always damp, and generally

produces rain or snow. It frequently succeeds to the north-west, and is then for the most part attended with a clear sky.

5. *The West.* This is generally a cool and rapid wind. From the region it traverses in reaching this place, it must necessarily be dry and enlivening. In the winter, when it continues long enough for the air of the Chippewan Mountains to arrive, it produces intense cold, sinking the thermometer sometimes below cipher.

6. *The North-East and South.* These winds do not prevail respectively more than one week in the year. The first seems to possess most of the qualities of the north-west, and the second of the north-east; the third appears to be a modification of the humid south-west, and is always stormy.

In regard to the weather, on the Ohio, the following table, setting forth the results of 4,263 observations, will afford sufficient information for the general reader. Observations made in other parts of the upper Mississippi states, would probably, give nearly the same proportions of clear and cloudy weather.

	Clear days.	Cloudy days.	Variable days.
1—180	107	68	
2—158	112	91	
3—187	78	85	
4—152	106	107	
5—185	111	68	
6—172	112	74	
Mean terms	172. 33	104. 33	82. 16.

From these results it may be expected that, of the 365 days in the year, about 176 will be fair, 105 cloudy, and 84 variable.

The condition of the weather, in each month of a mean year, for the above period, is exhibited in the following statement.

	Clear days.	Cloudy days.	Variable days.
January,	9. 8	13. 1	7. 8
February,	10. 3	12. 0	6. 5
March,	13. 5	9. 1	8. 3
April,	13. 1	10. 8	7. 6
May,	15. 0	8. 5	7. 5
June,	15. 5	5. 0	9. 6
July,	19. 0	5. 5	6. 0
August,	19. 6	4. 6	6. 5
September,	19. 5	5. 3	6. 1
October,	16. 1	6. 0	8. 1
November,	9. 5	13. 5	5. 5
December,	9. 6	14. 1	5. 8

From this table it appears, that July, August and September, have the greatest, and about an equal number of fair days; that October, June and May, compose the next class; to which succeed the months of March and April, followed by February, December, January and November; that in the four latter months there is the greatest proportion of cloudy weather; that next to

these rank April, March and May, succeeded by the remaining months, which are nearly equal. Lastly, that in the number of days which are variable, according to the sense in which that term is here applied, there is among the months no great difference.

The quantity of water in the form of rain and snow, which falls annually in the west, has not been accurately ascertained. It is probably about 36 inches, and nearly the same as in corresponding latitudes, east of the mountains. Taking the mean of a series of years; it is found that in April and May there falls the largest quantity; next to these are November, March, December, July and October, succeeded by January, August, February, September and June. The same month in different years, affords very different quantities of rain. September has been observed to vary in this respect, from less than an inch to more than five; October from half an inch to eight; and April from two to nine. The spring rains are sometimes excessive, and protracted for eight or ten weeks, during which there are showers, perhaps on an average every third day. During the spring of 1813, there fell upwards of sixteen inches; four times the quantity which fell in the ensuing four months. At other times this state of things is reversed. In the spring of 1814, there fell not more than nine inches; and in the three subsequent months the quantity was equal to fourteen.

Every irregular distribution of the spring and summer rains is of course prejudicial to agriculture. The copious and long continued storms of the former season, now and then check the early growth, or even prevent the planting of many important vegetables. To these rains such dry summers occasionally succeed, that the pastures are consumed, the leaves of the Indian corn become curled, and those of many forest trees, in dry situations, die and fall off before the usual time. But, fortunately, such extraordinary droughts occur too seldom, and are too limited in their extent, to be regarded as any great calamity.

From the valley of the Tennessee river, to the summit level, between the Lakes and the waters which flow into the Ohio, the snows become deeper and deeper. In Tennessee they seldom exceed a few inches—in the centre and north parts of Ohio and Indiana, they sometimes, as was the case in 1830—1, fall to the depth of two feet. North of the Ohio river, the snows are deeper in proportion to the latitude, than they are on the opposite side; which is owing, perhaps, to two causes; first, the greater elevation of the interior of Illinois, Indiana, and Ohio; secondly, the vicinity of the lakes. At Cincinnati, the deepest snow which falls, does not exceed a foot; but one-third of that depth is a more common maximum for the winter. This being the case, and periods of mild weather with rain occurring frequently, in almost every winter month, the ground is seldom covered for any great length of time. Severe winters, however, have occurred a number of times, in which the same snow has continued on the ground for several weeks, during which the Ohio was bridged with ice from its sources to its mouth. This happened as far back as 1796, and was re-

peated as late as 1831—2, showing that no particular change of climate has yet taken place in the west.

More snow probably falls east of the mountains than west, below the latitude of 40 deg.; above the parallel, the difference is not perceptible. This can be easily explained. In the maritime states every eastern wind, in winter, almost of necessity brings snow, as it transfers the atmosphere of the sea, over the colder surface of the continent. In the west, the great lakes supply, in this respect, the place of the Atlantic Ocean, and augment the depth of the snow for two degrees south of their shores. The fogs of the western rivers are said to be denser, than those of the eastern, but additional facts are necessary to an accurate estimate.

In tornadoes, hailstorms, winter thaws, and floods, summer frosts, premature springs, anticipating autumns, and other anomalies, the climates of the east and west, in the same latitudes, seem not materially to differ.

In the Interior states, the pleasantest travelling and emigrating months, are April, May and June; September after the equinox, the entire month of October, and the first half of November. The vernal travelling season, is more showery than the autumnal, but from the fulness of the rivers, and the lively green of the forests and fields, more cheerful. The autumn is smoky, dusty, and often deficient in water, but serene, equable in temperature, and decorated with leaves of every tint, which present the traveller of taste with an untiring succession of picturesque and beautiful views.

June, 1832.

MY UNCLE'S EXPERIENCE.

“Pooh! Pooh! all nonsense, perfect nonsense!” exclaimed my uncle the other evening, after having read through attentively, one of my most celebrated papers on hygiene; “Behold me now sixty years of age, hale and hearty—To attain to this condition at a period when other men sink beneath their years, did I diet and starve, and worry, and fuss? no, no—I drained my bottle of wine daily, besides, on occasions, an additional one or two, to keep my friends in countenance; I have eaten hot suppers, and cold suppers without number; I have gone to bed at twelve o’clock, night after night, and did’nt rise next morning, as you may suppose, much before nine o’clock; and I can assure you, all this never caused me a moment of uneasy feelings, much less of sickness!”

So spake my uncle, and in the honesty of his heart he verily believed that he was uttering the actual result of his own experience. The truth of his declarations he would have maintained before Emperors and Councils, Judges and Juries. And yet a very slight retrospect of his own life, could he have divested himself for a moment of certain prejudices, the result of opinions and habits to which he had for so many years been addicted, would have shown him that, in nearly every particular, the real facts of the case were the very reverse of what his statements would lead us to sup-

pose. That in truth he was himself a living commentary on the reality and importance of hygienic rules.

My uncle was by birth a Saxon. At an early age he left his native land, and arrived in Philadelphia with no other capital than a light heart, an intimate acquaintance with every thing relating to the practical details of commerce, and ample certificates of his industry, his sobriety, and his probity. With these *slender* means, and in the midst of strangers, he succeeded so well in "getting on in the world" that his thirtieth year found him a flourishing wholesale and retail merchant, with a capital of ten thousand dollars.

With the exception of the ordinary ailments of childhood, and a cold upon the chest, that had very nearly consigned him to his final abode, and which he had caught while serenading the lady who subsequently became his wife, one stormy night in the fall of the year, he had lived to the age just mentioned in a state of uninterrupted health. Full of spirits, with just that much devotion to business which prudence dictates as necessary to ensure success, plain and simple in his diet, contented in his mind, his only amusements were a walk, of length sufficient, however, to cripple a modern dandy, an occasional excursion on horseback, and once a week a private concert, and a game at nine pins or at tennis.

At thirty, my uncle married and soon after, he exchanged his store for a counting-house—confining business entirely to that of a shipping merchant. For some time, no alteration whatever took place in his ordinary habits—He of course had a greater amount of leisure than when he was tied down to the counter for the greater part of the day, and this leisure was chiefly spent in domestic cares or in the houses of his own friends, or in those of his wife's numerous relatives. His manner of living was still as plain, regular and simple as heretofore. His health too, was as good, and his mind as cheerful.

At length, however, my uncle's habits did undergo a change—but by degrees only. He became less active—day after day passed without any longer walk being taken by him, than from his dwelling to his counting-house and home again. He indulged himself more too in the morning, than he had been wont to do; the state-house clock often sounding eight, or even nine before he was abroad; at the same time, the pleasures of the table began to be a matter of more serious importance than he had considered them formerly—he became more difficult to please than formerly both in the nature and preparation of his food, and often, worst change of all, he would consume the greater part of the afternoon in discussing, by himself, a bottle of rare wine, and I know not, and doubt whether he did himself, how many cigars. Very quickly, he became so much the slave of his stomach that besides his domestic meal, rich in variety, and indulged in to satiety, the night also, was spent in feasting.—Little parties of his friends and countrymen were formed, to meet at some favourite eating house, for the only apparent purpose of devouring plate-full after plate-full of fried oysters, stewed terrapins or boiled lobsters with their etceteras, and

to drink large draughts of wine or whiskey punch. Although my uncle was never known to drink to such an excess as to produce a state of absolute intoxication, yet the mode of life we have just described produced a very marked change in his appearance. At his forty-fifth year, his body had nearly doubled in bulk—he lost nearly all the vivacity he displayed in former years—his eyes exhibited a dull, sleepy look, and his nights were sleepless or disturbed. Although from his portly exterior and dark rosy complexion, he was often complimented upon his robust health, yet he frequently complained of being troubled with certain uneasy but scarcely definable sensations in his head, stomach and limbs—For these the doctor was often consulted, though his prescriptions were seldom followed for more than a day. My uncle had very little faith in the virtues of medicines. In this manner he went on until his forty-eighth year, when he was suddenly attacked one day, immediately after dinner with a severe fit of apoplexy; from which, however, he was happily recovered by the prompt and efficient treatment of his medical attendants. Sorely against his will, however, he was restricted for upwards of three months to a very spare diet, was debarred the use of wine and forced to exercise daily in various ways. At the end of this period he was pronounced entirely well. Never in fact, as he himself confessed, had he felt himself in better health. Gradually, however, he fell into his former mode of living, and in his fiftieth year he was confined to his bed with a severe attack of gout; the first he had experienced. His physician now very plainly explained to him his danger, and pointed out the only conditions upon which he could hope to enjoy life without intense suffering, and postpone for many months a fatal inroad upon his stomach or his brain. After much persuasion, he was induced to adopt, to a certain extent, the plan of living which had been laid down for him. That is to say; his wife succeeded in reducing his daily bottle of wine, to one or two small glasses, and in confining him to food of a lighter, and more simple character than he quite relished. Frequent walks in her company, or occasional excursions, with his children, into the surrounding country, when the season was favourable, together with many a call of duty and of charity, supplied him with that constant exercise of which he stood so much in need. He was taught too, by the same kind spirit, to seek his bed at a regular and early period of the evening, and to forego his accustomed heavy suppers, while she contrived to wile him from his couch, each morn, at an hour, which he peevishly declared to be unusually early. This life of privations, as he termed it, was at first irksome enough, but a short time sufficed to reconcile him to it,—in the end, it became even pleasant, and up to the present period he has persisted in following it—rather becoming, in fact, more rigid in his habits than in any degree relaxing.

My uncle has now numbered upwards of sixty summers, and never did there exist a more hale, robust and active old gentleman. A little notional and selfopiniated, it is true, in regard to many things, but nevertheless, always sufficiently cheerful, good,

natured and desirous of pleasing, to attract around him the company of the young. His own children, his grand-children, his nephews and his nieces, in particular, seldom enjoy an hour so much as when it is spent in his company. He has useful suggestions, practical hints and stores of information for those who have already entered upon the active duties of life—he has sound advice and sage council, always delivered in an amiable and unpretending manner, for such as are yet in their minority; and for the still more youthful, some playful story—some plaintive ballad, or many a pretty toy.

From this short sketch of my uncle's life, we perceive how completely his own experience contradicts the declaration with which this narrative commences. So long as he lived a life of temperance and active industry, so long as his habits were simple and regular, so long he enjoyed their invariable fruits, health, cheerfulness, and comfort. The moment he deviated from this plan of living, and fell into habits of luxury and indolence, he experienced a corresponding decline in the health of his body and the cheerfulness of his mind, until, by a continuance in error, serious disease was finally induced—and it was only by returning to his former sobriety and activity that his life was preserved—the health and vigour of his frame were repaired, and the cheerfulness and serenity of his mind regained.

These facts, however, my uncle cannot be brought to acknowledge.—It is true, he had experienced an attack of apoplexy and of gout, but these, he insists, were merely accidental, and might have happened to any man of his particular form of body whatever were his habits. Eating and drinking had nothing to do with them! And then, as to his renewed health and vigour, when his habits became more regular, active, and temperate—why, what connexion, he will ask, has the one with the other? Was it not the same with all his ancestors? It is a family peculiarity, this return of youth in the evening of life!

So does my uncle—so do thousands of mankind, obstinately shut their eyes upon the evidence of their own experience, and overlook the useful lesson that it teaches.

FACIAL EXPRESSION.

Having already (p. 16—19) explained to our readers the muscular mechanism by which the features of the face are made to vary their expression—we shall on the present occasion make a few remarks on the circumstances under which these changes of countenance take place, and the degree of importance which as physiognomists we ought to attach to them.

The chief points of expression are, at the angles of the mouth, between the eye-brows, and the eye itself. According to the predominance of the emotions of a pleasing or a painful kind, will be the elevation or depression of the angle of the mouth, the drawing down and corrugation, or of the upward turn of the skin and muscle between the eyebrows; and the lustre or dulness of the eye. If,

then, we read in the expression of the face, evidences of health and pleasurable emotions and frame of mind, or the reverse, sickness and depressing passions—these are seen more particularly at the points just mentioned. Smiling, laughing, content, self-complacency, are all accompanied by a more or less elevation of the upper lip, and drawing upwards and outwards of the angles of the mouth by means of the muscles already noticed. Whilst care, sorrow, depression of the mind in general, and want of self-confidence, are marked by a falling or depression of the lower lip and jaw, and a drawing downwards and outwards of the angles of the mouth.

Conjoined with the feelings of the first class, are those modified ones constituting pride, disdain, scorn, which with a slight elevation of the angles of the mouth also show themselves in a drawing up and dilatation of the nostrils, by means of appropriate muscles already designated. Often at the same moment in which these are active, or rapidly alternating in action with them, is the muscle of the forehead and the knitter of the eye-brows, giving rise to a frown or scowl, as in anger, hate, &c.

We can now understand by our knowledge of a law of the muscular system, viz: that the more muscles are exercised, the larger, stronger and more defined they become, how frequent indulgence in strong feeling, should give force and prominence to particular muscles of the face; and why we can infer from the fulness of these and the promptness with which they contract under apparently slight mental excitement, the proneness of the person to indulgence in these feelings, or a tendency to strong emotions and passions. There is no mystery in this. The arms, much and frequently exercised acquire increased, often prodigious size and strength—the change here is in the muscles of the limb. So in like manner the muscles of the face by similar exercise—an exercise the result, be it remembered, of powerful and conflicting emotions, become fuller and stronger, and give after a time, an expression to the features, or, rather make up features which are recognized at a glance as effects of particular conditions or states of the mind.

The constraints and artifices of high civilization often forbid these outward manifestation of feeling, which we see in children and in those brought up comparatively in a state of nature, as the savage and the clown. Higher motives also, derived from morality and religion interfere to prevent these external evidences: they will even go further and prevent the excess of the feeling itself and thus withhold the cause of this external display. But after all, making due allowances for these modifications, we can generally predicate of the countenance the habitual force of these emotions, even in moments of quietness and tranquility of mind. The reason is obvious. Any set of muscles long called into action acquire a predominance over others not thus exercised. Hence a person accustomed in his daily occupations to stoop, after a time retains this attitude even when walking, or so engaged as not to call for it. Thus it is with the muscles of the face. In a state of repose of the features; as when the lips rarely meet and the eye is

not fully opened, the lines or furrows caused by long prior motion will still be seen. Nor can they be entirely concealed by a determined effort of volition, as when the lips are firmly compressed against each other, the eye fully opened and fixedly looking on the person or other object before it. We say that even in this forced and artificial state, the predominant expression will be perceptible to an attentive observer. But the experienced physiognomist will not allow himself to form an opinion too hastily and at first glance. He will wait until attention is withdrawn from the object of his study: the lips, then no longer compressed, allow the angles of the mouth to take their customary direction either upwards or downwards in order to express joy and hope or gladness, or despondency and sorrow. There is another phase which he must watch, that in which the person is conversing,—the lips although now moving under the influence of the will, do not resist entirely the habitual inclination of the muscles to draw either up or down angles of the mouth. At this time also the elevator of the angle of the mouth and of the wing of the nose is more likely to be in action and show whatever tendency there may be to its frequent exercise in indulging feelings of disdain and contempt.

Those who have not studied physiognomy, can hardly suppose it possible that a little change at the corners of the mouth should so completely alter the expression of the countenance. It was a knowledge of this fact which enabled Pietro di Cortona to astonish his patron the Grand Duke Ferdinand of Tuscany. This prince one day admiring the figure of a child weeping, which Pietro had just painted; the artist gave it only one touch of the pencil, and it appeared laughing; then with another touch, he put into its former state—with the remark, “Prince you see how easily children laugh and cry.” The transformation here was accomplished by simply changing the direction of the angles or corners of the mouth.

The eye has been called the soul of the face, the mirror from which are reflected the feelings of our nature. We have heard of the eye of genius, of lofty character and so forth. There is no such thing. There is no colour or configuration of eye which can be called characteristic of genius any more than of elevated sentiments. Whence then, we may be asked, its expression? This depends on the movements given to it by the numerous muscles, which passing from the orbit are attached to the ball—spreading as it were over it, and which, according as one or other is in action, draw the eye inwards, outwards, upwards and downwards, besides causing it compound movements of rolling the eye and turning it downwards and outwards, and upwards and inwards.*

A fixed and steady look is accomplished by the equal action of the four straight muscles of the eye and implies a determined effort of volition. Just as the reverse, or frequent irregular motion of this organ argues want of firm purpose and resolve, timidity and fear.

* See a description of these muscles in Vol. 3. page 77, of the *Journal of Health*.

Those physiognomical signs are in perfect conformity with the laws of the muscular system in general. The more active the brain, that is to say, the more energetic the mind, the greater is the nervous radiation to the muscles, and the more prompt and vigorous is the contraction of these latter. A person standing with his arms pendent by his side and his knees slightly bent, and head leaning a little forwards, evinces a mind at rest or simply in a state of quiet attention. When, again, we see him head erect, knees straight, arms slightly raised from the body with a tendency to close the fingers, his mind is shown at once to be on the alert and active. Let the same person be exhibited to us with his arms raised to right angles with his body, shoulders elevated, elbows bent and hands clenched, and we are at once assured that he is under strong if not violent mental excitement. Let the action of the muscles be carried so far as to be convulsive, irregular, distorted, and we need hardly any other evidence of maniacal ravings, or of the person being beside himself. What is here said of the muscles of the body and limbs, applies with equal force to those of the face. The three states, of repose of these latter, of contraction in a given direction, and of violent contortions or grimaces are evidences of as many different conditions of the mind, viz; tranquility, exercise of a particular emotion, and involuntary or insane ravings.

There are two movements of the eye indicative of opposite kinds of sentiment or emotion. The one is the turning up of the eye and rolling it slightly inwards as when a higher power is invoked and adoration tendered; the other is turning the eye downwards and rolling it outwards as in expression of pride and disdain. These are fixed and invariable modes of expression, when the individual is either under the influence of the feelings just mentioned, or chooses to simulate them. Long indulgence in either variety is productive of a more or less permanent expression of eye, which it is difficult to conceal without great self-constraint of one's feelings.

In anger and the like violence of emotion, the muscles of the eye acquire a spasmodic rigidity, by which the globe is compressed, and the fluids of the coats retained and prevented from circulating freely in their minute vessels; there is also an increase of them on the outer surface, and the eye assumes a more shining or glistening appearance. This last is seen when the person is under the influence of strongly excited hope or of joy. But in anger, there is the superadded fearful contraction of the eyebrows, tremulous dilatation and contraction of the nostrils, and a quiver about the corners of the mouth, which is also lengthened.

The peculiarity of expression in the nostrils and corners of the mouth is not so much the direct effect of excitement of the brain, as associated with laborious respiration and hurried movements of the heart. In violent diseases of the lungs, the sephysiognomical characters are generally evident and serve in place of other signs, especially in children who are unable to acquaint us with their feelings, as premonition of danger. These signs are the hardest for

a person under the influence of anger to conceal. He may, where he has a strong interest and desire to prevent the display of his feelings, avoid the frown and the scowl, or any grimace or gnashing of teeth, or start or throwing out of his limbs—but an immediate and involuntary effect of his state of mind, is the hurried and impeded breathing and irregular contraction of the heart, which bring with them the twitchings of the corners of the mouth, and the movements already mentioned of the nostrils, together with a paleness of the face, after the subsidence of the first flush of passion. This is a dangerous state, the more so by the very efforts made to conceal it; and we sometimes see a person drop down senseless in a fit of passion, who to a superficial observer seemed free from any strong emotion. Even here hypocrisy brings its own punishment; for, a more open display of the feeling of anger would allow of the blood to circulate more abundantly in the muscles of the limbs and through the skin; and the free heaving of the chest would facilitate its passage through the lungs and unload the heart of the quantity of this fluid which oppressed it. Comfort and health, to say nothing of our higher moral obligations, require of us, therefore, not the concealment of violent anger, but abstinence from the emotion or passion itself.

On a recapitulation of what we have advanced, it will be seen that the study of facial expression as a branch of physiognomy and divested of extraneous views, consists in observing the play of the features, as the result of the movements performed by the contraction of muscles under the controul of the mind, and connected with the material instrument of this latter, or the brain by means of nerves. Every human face has the same number and series of muscles, passing in similar directions. In all human beings these muscles are connected with the brain by nerves equal in number, and not materially differing in size in different persons. In all there is a brain, in the which however there are notable differences among mankind in regard to its size, proportionate development and energy of function. It is these differences which modify so greatly the expression of the moveable parts of the human face, in other words, which create the varied expression of the feelings and emotions of the mind.

A full or a sunken eye, a rounded or hollow cheek, a complexion with the tint of the rose or the lily, or that of a saffron hue, bushy or finely pencilled eyebrows, a nose Grecian or aquiline, have no value to the physiognomist, as evidences of disposition or character. An attenuated frame, a pallid cheek and eye without lustre, may it is true, be effects of indulgence in strong and contending passions; but of their nature it would not be easy to augur from such appearances. On the other hand, again, we cannot but be aware that these and numerous other disfigurations of the face and form, are the consequence of bodily disease in which the mind had no share.

The reader may perhaps be surprised that we have said so little of the face, as expressive of intellectual power or of its absence. It is on this point that physiognomy has most misled its followers;

or, we should rather say, it is on this point that the system has been most perverted and tortured from its true and natural bearing by those who have studied it. We have examined the countenance of individuals of admitted genius—we have looked around us on a body of men perhaps the most distinguished of their day for originality of thought, and high and varied attainments; among whom were a Cuvier and a Laplace, but in vain could we discover any decided feature, expression of features, by which to infer the loftiness and range of their intellectual endowments.

This will surprise us the less, when we reflect on the small proportion which the part of the brain, destined for the performance of the intellectual faculties, bears to that by means of which the *sensations* and *propensities* of our nature are evidenced. The operations of mere intellect are for the most part tranquil, they do not excite to any active movements either the muscles or other parts of the animal economy. The feelings on the other hand make up the greater share of mind, they are in perpetual excitement, and bring into constant action the external and mobile parts of the human structure; and chiefly the muscles, as well of the face as of the rest of the body.

THE FIRE SIDE.

The heartless, the discontented, and the unthinking part of that crowd which we denominate the world, may perhaps, be little sensible of, or even condemn, the attractions of the fire-side, in the same manner as they overlook every species of quiet enjoyment, or plain domestic ease. But men of enlightened minds and honest feelings; the only men of authority on any point connected with the enjoyments of life, look upon their own fire-side as their most comfortable retreat; the pleasures which its associations produce as the most innocent and lasting. Wearied with the fatigues, or what is worse, disgusted with the impertinences of the day, they retire within their own domestic circles, as the mind does into our own bosoms, and seek for solace and relaxation in the most cheerful portion of their homes. Disguise and restraint are here laid aside, and the mind as well as the body, appears more beautiful for its dishabille. That perfection of earthly happiness, which in warmer and more constant climes, was expressed of old, by setting under one's own vine and fig-tree, is, with us, more sensibly felt at this season of the year, by reposing, after the toils of the day, by the side of one's own fire. But it is not by the bachelor, in solitude, that all the pleasures of this repose are experienced—the solitary hearth possesses none of those comforts, those nameless attractions, and mild delights which the fire-side does: that is enjoyed in company with those we have cause to love—it is in the family circle, when we see ourselves surrounded by “wife, children and friends,” that the fire-side sheds upon the heart its most benignant influence. It causes us to feel our affinity with the better part of our common nature—enlarges our charities, and brings

us to a nearer converse with each other. In this manner it promotes reconciliation between enemies and those feelings by which the bond of union between friends and relatives, is strengthened. There is a kind of sullenness in the tempers of some men, who possess, otherwise, many amiable qualities; this sullenness the genial heat of a domestic fire-side softens, as the fire does metals, rendering them more fit for use. How often have we seen in a room a number of intelligent individuals met together, who looked upon each other with coldness, and could scarcely furnish an hour's conversation, for no other reason than because they were at too great a distance from each other, and from the chimney corner. But when drawn in closer contact, by the attractions of a glowing hearth, the very same individuals have proved the most agreeable and entertaining company imaginable. The fire-side dispels the gloominess of the brow, and casts upon the countenance, not only the ruddy glow of youth, but its cheerfulness also. Here united in converse with those we love, or with a select circle of intelligent friends, how serene are our pleasures, how lasting, and how innocent! We have laughter without folly, and mirth without noise. Reflecting thus the beams "of the sunny bank before us," we make the chimney corner, we will not say, in Cicero's expression, the *forge* of wit, but in philosophic language, the *focus* of it.

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They who think that a man must necessarily be a less able statesman and successful general, because he is addicted to learning and endowed with tastes for the fine and liberal arts, ought to peruse the Life of Frederic the Second, or the Great, as he is more commonly called, of Prussia. The father of this prince, Frederic William, himself a rough and brutal soldier, whose ambition was to have the tallest men for his army in Europe, mistook the real character of his son; and confounding, as many have done before and since his time, a fondness for the arts of peace with want of energy and inability to make war, imagined that he saw in the refined habits and literary tastes of the young prince, the signs of an indolent and luxurious reign.

Frederic was not only well read in history and poetry, but was himself a historian and poet. His histories of the House of Brandenburg, and of his Own Times, are remarkable for the interest of the events, and the impartiality with which he relates them. In his private and familiar correspondence, we have evidences of his

taste, his love of philosophy and letters, and his addiction to poetry, even amid the turmoil and distractions of a camp life. He was fond of music, and had for a long period, even after he ascended the throne, daily concerts, in which he himself took a conspicuous part with his flute. Of this instrument he was passionately fond, and was a great master in the art of playing upon it.

With his military prowess, what reader is not familiar. In the seven years war with Austria, the States of the Empire, Russia and France, he made displays of rare generalship and intrepidity which have not been surpassed, we might say, which have not been equalled in modern times, even by Napoleon himself.

His civil administration, and the benefits he conferred on his territories in this way, are not perhaps so generally known. The Code Frederic was an invaluable gift to his subjects, by reducing the whole body of jurisprudence of the several states of Prussia to one system, agreeing in all its parts. He established, moreover, colonies in the parts of the country hitherto barren and desert; he introduced from other nations, those branches of industry in which they excelled; the rural economy and farming of England; the porcelain manufactures of Saxony; the culture of the silk-worm, and the manufacturing of silk. "Wherever improvements or changes were to be made, the king was sure to be present; and all his leisure was in fact, occupied in tours to the different parts of his dominions; in which he inquired into the different wants of his people, and devised means for their relief; encouraged public works already commenced, and planned fresh ones." Among these latter, were the great canals of Plauen, between the Elbe and the Oder, and of Bromberg, uniting the latter with the Vistula.

Of the personal habits of Frederic, the exact division of his time, strict economy in all the departments of state, as well as in the expenses of his own household, we may be induced to speak hereafter.

Abroad, from beneath the shade of their own porch, and in the bustle of society, men sometimes pass for more, though oftener for less than what they are worth. The politician rolls himself up like a hedge-hog before strangers; but in private he shoots his quills. The merchant the moment he steps beyond the sill of his own door seems totally intent on gain—the lawyer on the interests of his client, and the physician in contending with pain, agony and death. But in the bosom of their own families, their feelings, characters

and interests, seem to assume an entirely different form, and if they exhibit here more of the foibles and weaknesses of human nature, they discover likewise to a greater extent, those amiable and endearing traits of character, which interest or false pride so often induces men to conceal when mixing with the world. The liberty and leisure enjoyed at home cause the true character to be developed. It is in the domestic circle—in the family parlour—it is in his gown and slippers, when entering into the pleasures and interests of those most dear to him, or merely in issuing commands to his domestics, that a man is thoroughly seen. He there acts without disguise or restraint. He there assumes no artificial airs of importance, but calmly lays aside his foreign manners, his professional peculiarities, and all his extravagant pretensions. Whether accustomed to rule in the Senate, to declaim at the bar, to expound in the desk, or to conquer in the field, he claims no privilege from his factitious consequence, when he enters his own mansion. The tenderness of a wife instantly arches his brow, and he gladly exchanges the robe or the sword, the high toned voice and the stately port, for the prattle of his children, and the puerilities and sports of the hearth. Here unshackled by fashion he acknowledges the opinions of no other tribunal than that of nature: neither the stranger nor the bachelor can intermingle with his joy.

He will not blush that has a father's heart,
To take in childish play, a childish part;
But yields his sturdy neck to any toy,
That youth takes pleasure in, to please his boy.

Due attention to the principles of Physiognomy, as laid down in our first and present numbers, will, we believe, convince the reader of their accuracy and strict foundation in nature. They explain to us the reason of the unpleasant feeling produced by the smile or a particular cast of the features, intended to inspire confidence, of certain persons. It is not the mere smile or composing the features into a simulation of cordiality and good will that repels us, but it is the awkwardness of these efforts—their evident contradiction with the customary expression of an entirely opposite nature. We experience very much the same emotions at this attempt to throw the features into a masquerade, that we would on beholding a rough awkward clown, habitually brutal and regardless of humanity, all at once take it into his head to assume the carriage, gait and movements of a person constitutionally and by education and practice, kind, gentle and polished.

The rules of Bulgarin, as he makes Ivan tell them, are, to form one's judgment not from the lines of the countenance, but from the play of the features and the mode of reception of the individual.

"If a man," says this writer, "looks at me through his eyelashes, or does not look me fair in the face when he speaks; if he minces his words through his teeth, and studiously composes his speech during the conversation; if he discourses with me, or only contradicts me in order to draw out a fuller explanation from me; I declare I would not trust such a man. An artificial smile and a constrained laugh, serve me for evidences of insincerity. Grimaces made involuntarily with the mouth, a continual moving of the lips, and biting them, are with me bad omens. An unequal gait in which a certain sort of foxish turns are visible, a wrenching of the whole body upon one centre, or crouching similar to that of a cat before a mouse, and a stretching of the head forward like a serpent preparing to throw itself upon its prey, are in my eyes infallible marks of a bad man. A loud manifestation of joy and greeting of every acquaintance, appear to me very suspicious."

Among the recent publications which possess claims to general notice and perusal, may be mentioned "*The Catechism of American Law*," adapted to popular use—Published by S. C. Atkinson. This is not one of those books which profess to make every man his own lawyer—a promise as well calculated to ease people of their money and property, as an Invalid's Vade Mecum, or "*Popular Medicine*" is to destroy their health, and abbreviate their life. The aim of the Catechism is higher and better: it is to make men acquainted with those rights of person and property which are more or less daily exercised; but without a knowledge of the just and legal limits of which, they may seriously suffer, either by foregoing their own privileges, or encroaching unwittingly on those of others. Without meaning to condemn or undervalue classical studies, we may be allowed to express our belief, that a portion of the time given to heathen mythology, and even to the antiquities of Greece and Rome, and an inquiry into the respective powers of consul and tribune, might be much more profitably employed in a study of, and committing to memory, parts of the Catechism of American Law. A knowledge of the relative duties of *husband and wife, parent and child, guardian and ward, master and servant, principal and agent*; and of the *laws of partnership, of personal property, of insurance, of the contract of sale, &c.* is not only intrinsically valuable to nearly every citizen of the republic, but is also good preparation for his properly understanding the more complex relations between the government and people, and of the true bearing of a federal union.

We dare not venture, of ourselves, an opinion of the accuracy of the author, in his manner of stating the several principles and propositions of his work. But we may, without any accusation of credulity or servile deference, pin our faith, in this matter, to such a man and such a jurist as Chancellor Kent, whose favorable testimonial accompanies the Catechism.

“Scoffs, calumnies and jests, are frequently the causes of melancholy. It is said that a blow with a word strikes deeper than a blow with the sword; and certainly there are many men whose feelings are more galled by a calumny, a bitter jest, a libel, a pasquil, a squib, a satire, or an epigram, than by any misfortune whatsoever.”

How often do we find verified these remarks of old Burton. Not only is personal hostility thus engendered: nations are embroiled, and bloody wars carried on, because one sovereign has thought fit to be satirical on a royal or imperial brother, or, still worse, sister. Frederick the Great of Prussia, admits that he drew on himself the personal enmity of the Empress Elizabeth of Russia, in consequence of sarcastic remarks upon her habits and propensities; and was in consequence, involved in war with that power at a time when he was deemed barely able to make head against Austria, Sweden, France and the confederates of the Empire. In fact, his ruin was nearly completed, and it is doubtful whether all his consummate military skill in a series of brilliant battles and marches, would have availed him against so formidable a combination, had not the death of the Empress Elizabeth freed him from one of the most powerful and bitter of his enemies. Untaught by this severe lesson Frederick allowed himself to be a satirist in verse of Louis XV., whose demerits did not by any means make him the more willing to submit to this kind of castigation,—infinitely more galling than the defeat of his armies by Prince Ferdinand of Prussia.

CALDWELL ON INTEMPERANCE.

We have in the essay before us by Dr. Caldwell, entitled, “*Thoughts on the Pathology, Prevention and Treatment of Intemperance, as a Mental Derangement*,”* another valuable contribution from ‘the far west’ to medical literature and good morals.

The learned author begins his essay by a merited compliment to Temperance Societies, and bears evidence to the manifest good

* From the Transylvania Journal of Medicine and the Associate Sciences. For July, August and September, 1832—Lexington, Ky.

which has already resulted from their efforts. He is himself no zealot in the cause—not that he is backward in stigmatizing drunkenness; but he gives a more enlarged view of intemperance than would at first be embraced by the mental vision of many temperate men. His meaning will be best understood by our using his own language on the occasion.

“By a liberal but fair interpretation of the term, intemperance admits of a much more extensive meaning, than is usually attached to it. It includes all excess, not only in the use of intoxicating liquors, but also in eating, in the exercise of the passions, and in the indulgence of any of the animal propensities. By inordinate excitement, even the moral faculties themselves may be fired to intemperance, and converted into sources of irregularity and mischief. It is my wish, therefore, to imbue this article with somewhat of the spirit of the great Apostle, when he issued the exhortation, “Be temperate in all things.”

“The passion of love may glow with intemperate heat; its intensity may become so excessive, as to render it, for a time, the despot of the mind, and the torment of the heart; the system may wither and dissolve under its dominion; or it may lead to some dark catastrophe of guilt. A paroxysm of causeless and inordinate resentment, or of uncontrolled rage, is as gross intemperance, as a fit of intoxication. And we are invoked as earnestly, by the decorum of civil and cultivated life, and as solemnly warned, by morality and religion, to guard against the former as against the latter. Envy, jealousy, malice, and the love of gain, may all be heightened to the pitch of intemperance. Health and reputation may be subverted by them; the mind may canker, and the body decay under their influence; the harmony and well-being of society may be disturbed by them; and they have brought calamity and desolation on communities and nations. In their nature they are as debasing, as the intemperate use of intoxicating drink; in their spirit they are much more deeply tinctured with the elements of vice; and they often surpass it, in the extent of their mischief. Let those who pamper them, then, while they are gravely denouncing drunkenness in others, as a scandal and a vice, remember that they are nurturing within themselves, as deadly a foe to virtue and happiness. And, while they are anxious to extract the mote from their neighbour’s eye, let them not be unmindful of the beam in their own eye. I am justified in adding, that religious feeling itself,—a feeling at least so denominated,—having been sublimed into passion, has often turned to a spirit of persecution, and led to the perpetration of acts of horror. This is intemperance combined with profanity; because it importunes Heaven to sanction deeds that are disagreeable to earth.

“Intemperance in eating is too universal among us either to meet censure, or attract notice, except in very extraordinary cases. Worse still. Its universality prevents the recognition of its existence, and even leads to a denial of it. Yet, that it does exist, is

proved by the fact, that one American eats, on an average, nearly or quite as much as two Swiss, or two Highlanders, who are among the hardiest and stoutest of our race. In this land of plenty and freedom, where man is master alike of his stores, his actions, and his time, he who should condemn his neighbour for excessive eating, would, at the same time, condemn himself, as being equally guilty of it. It is indeed our most besetting sin against ourselves, a principal source of our ailments, and therefore a serious impediment to our efficiencies both bodily and mental. But every act we intentionally perform, which detracts, in any way, from our capabilities to do good, is a violation of our duty to society, whose welfare we are bound to promote, by faithfully devoting to it our health and strength, instead of wasting them in animal indulgences."

Dr. Caldwell's description of the various modes of intemperance in eating, and of the multiplied evils thence resulting, though too long for present insertion, shall be laid before our readers at another time in a separate extract.

Not less forcible is his condemnation of the use of tobacco, as another form of intemperance, not only injurious but peculiarly offensive. "It has its origin in mental inanity; and a similar emptiness accompanies its continuance." "I know," says the author, "of but three sorts of animals that delight in it; the tobacco worm, one of the filthiest and most disgusting of crawlers, the rock-goat of Africa, whose foulness of odour and filthiness of habit, make it an object of aversion which every thing shuns; and man, who has been pronounced and truly so, 'the glory, jest and riddle of the world.'"

Dr. C. concludes his strictures on the use of tobacco, and we are sorry we have not room for all of them, in these words—worthy of especial notice and remembrance:

"Nor is the intemperate use of tobacco an offensive and degrading practice only. It injures the health of those who indulge in it, often disqualifies them for the full discharge of their duties, and sometimes destroys them. A few of the most distressing and fatal forms of complaint which it produces, are dyspepsia, pulmonary consumption, marasmus, tremors, impaired vision and intellect, apoplexy, and palsy; and it aggravates many others. The range of its mischief therefore is extensive. One remark more, and adieu to the 'weed.' The excessive use of it often leads to intemperate drinking. It excites in its votaries, if not actual thirst, at least a hankering for stimulation. Hence among professed chewers, smokers and snuffers, there are but few water-drinkers."

The author next proceeds to the main point of his essay; which is to show "that drunkenness consists in a morbid condition of the brain—the spinal marrow and nerves being also affected." To spe-

cify he tells us that "the morbid affection which constitutes drunkenness is seated more immediately in the animal compartment of the brain"—in that part on the fulness and excitement of which depend the display of the various propensities of a more purely animal nature. It will be seen at once that Dr. Caldwell takes a phrenological view of the subject. The common and external evidences of drunkenness, however odious and disgusting, are in the opinion of the author, "trifles compared to the *internal* affection—that which subverts the order of things that God has established—which gives to the inferior portion of the brain the supremacy over the superior, depresses morality and intellect below appetite and passion, and elevates animality above humanity—the brute above the man."

Compatibly with this position is the assertion of the author that "drunkenness and its appetite are evils resulting no less from an organic cause, than an inflamed eye, or a lacerated muscle." The drunkard, is truly in respect to the ungovernable force of his appetite for spirituous drink, a monomaniac—a man insane on a particular subject, but rational enough on any other.

The following method of cure of this dire malady may startle many persons—tipplers as well as sober men. It merits, we think, an attentive consideration, and with the restrictions and modifications required by the individual case, it ought to be adopted.

"Am I asked, how drunkenness then is to be cured, and the tormenting propensity which leads to it, eradicated? I answer, by the same means, which are found successful in the treatment of others forms of insanity, where the cerebral excitement is preternaturally high. These are, seclusion and tranquillity, bleeding, puking, purging, cold water, and low diet. In this prescription I am serious; and if it be opportunely adopted and resolutely persevered in, I freely peril my reputation on its success. As a test of its correctness, give me the entire command of any one in a fit of intoxication, and I will speedily cure him of it. I will shorten his paroxysm, by more than the half of its usual duration, and his recovery from it shall be much more perfect than in former cases. This I will do by bleeding him, until he shall faint, or come very near it, puking very severely with tartar emetic, and bathing his head, neck, breast, and extremities, in cold water. This practice will immediately cool the fervour, and abate the inordinate action of his brain; and a subsequent sleep will set all things right. He will awake moreover without the head ache, dullness, and nausea, which so generally succeed a debauch. Nor will he feel the same fervid desire to return to the bottle, and brutalize himself again, that he would do, had the fit been suffered to go off by degrees, without the use of means to shorten it. Let this process be repeated, as often as he shall relapse into intoxication, and, if he be not far gone in the evil, he will soon be reclaimed. Facts occur daily, to prove

the efficacy of a free evacuation of the stomach, in shortening a paroxysm of drunkenness. The drunkard who vomits freely, recovers from his fit in a much shorter time, than he who does not. This arises not so much from the mere emptying of the stomach of the liquor swallowed, as from the effect produced sympathetically on the brain, by the emetic process. The excessive excitement of the brain is moderated by it, and the equilibrium of its action and faculties restored. If interrogated on the subject, the Resident Physician of the Kentucky Lunatic Asylum will state, that he finds, in the institution he superintends, no difficulty in curing *mania a potu* by the treatment here directed. Under this head I shall only add, that it is during the stage of high excitement of a paroxysm of drunkenness, that affusions of cold water can be beneficially employed. During the stage of torpor, when the temperature of the skin is rather below than above the standard of health, they are inadmissible. The other curative measures recommended are always useful."

The medical treatment of habitual drunkenness is thus given:

"Let general blood-letting be employed, if indicated by a full habit, or an active pulse, and cups or leeches be applied about the base of the brain, in case any heat, tension, or uneasiness be felt, in that part of the head. Purgatives and emetics, or broken doses of tartarized antimony must be administered as may be requisite, moderate exercise in the open air should be taken, the tepid or warm bath will be useful, and the clothing should be such as to prove comfortable and maintain the healthy action of the skin. The diet used must be of the plainest kind, easy of digestion, and taken in moderation. Abstemiousness in all things is essential to a cure. Salt is the only admissible condiment. Every thing stimulating, whether solid or fluid, must be scrupulously withheld. Its use perpetuates the complaint. Nor will it be desired, when the excessive cerebral excitement is removed. It is that excitement which creates the craving for stimulation, as pimples on the skin cause it to itch; and stimulation, when permitted, sustains the excitement. Thus do the two act reciprocally, maintaining toward each other the relation of cause and effect.

"The cure may be deemed complete for the time, as soon as all craving for strong drink and stimulating food shall have gone off, just as a paroxysm of ferocious mania is temporarily cured, when the patient becomes perfectly calm and pacific, and seeks solitude. And, by the measures directed, it may be made to do so, in a short period. Nor, under temperate habits, will it be more likely to recur, than any other form of madness. Insanity however, in every shape, is more or less periodical. In case of its return, a prompt repetition of the practice just prescribed will again subdue it.

"To diminish greatly the prevalence of habitual intoxication, then, if not to eradicate it entirely, let it be universally deemed and publicly proclaimed a form of madness (as it really is) and dealt with accordingly. Hospitals erected for the reception of drunkards, and authority given to carry them there, and subject them to the requisite treatment, would be among the most important insti-

tutions that could be established. Perhaps no other public charities would equal them in usefulness. They would produce an immense saving of life, health, property, and reputation. The inmates of them should be kept engaged in some active occupation. This would not only compel them to support themselves, instead of subsisting on the property of others, as a great proportion of them do, when permitted to go at large; it would teach them habits of industry, inspire them with something of the pride of independence, and, by pleasantly and healthfully exercising their minds, contribute to their cure and restoration to society."

We shall revert ere long to this valuable essay of Dr. Caldwell, with whose opinions on the subject treated of in it we are in general accordance—except on the wine question. But where so much is sound in doctrine and practice, we may overlook what we conceive to be an occasional lapsus of argument.

POLITICAL NOTICES.

We have already taken occasion to advert to the oppressive and tyrannical measures recommended by the Diet at Frankfort and to its obnoxious Protocol, as the work mainly of Austria and Prussia. The following document which we have translated from the original, will serve to show in what temper the more liberal part of the German people are inclined to receive the decrees of their respective sovereigns, issued in conformity with the protocol of the Diet. However much they may hereafter be curtailed of freedom of speech and writing, there is certainly no evidence of servility or fear in the language held by the inhabitants of Rhenish Bavaria to their king.

An Address of the Faithful Citizens of Rhenish Bavaria; or rather, An Explanation of, and Protest against, the Ordinances of the Diet of the 28th June, 1832.

TO HIS MAJESTY THE KING OF BAVARIA!

For some weeks past the minds of the inhabitants of Rhenish Bavaria, have been agitated by confused rumors of measures tending to actual violence, which have been determined on by your Majesty's ministers against this province.

All of a sudden, like a flash of lightning from a dark cloud, the Protocol of the Diet of the 28th June of the present year glared over Germany, and at once displayed to us the depth of the abyss on the border of which we stand—Civil war! The watchword of the Diet is—Death to the Constitutional System in Germany and in all Europe! Oppression of its adherents—Annihilation of all the fair blossoms to which the country on the point of political dissolution is looking with expecting eyes—Extinction of every noble sentiment of our nature! These are the inscriptions on the

banners of the party which begins to hold its iron rule over Germany.

What feeling heart can remain unmoved when hearing of the tyrannical oppression exercised by foreign nations, and of the cruel extirpation of all that is noble and great in a people. How much more profound must be the emotion of the loyal and patriotic inhabitants of Rhenish Bavaria, when they heard of the dreadful and almost incredible news:—The Diet has annihilated the German Constitutions!

But still hope had not entirely abandoned us. We looked to the Throne of our Prince, and expected of him, distinguished throughout all Europe as the Bard of the Greeks, and who once in the face of his whole people, voluntarily declared—I would not like to be absolute monarch. We looked to him to reject with indignation the shameful demands of the Diet. But this was not done.

The citizens of Rhenish Bavaria, will not, however, neglect to proclaim loudly, that the distrust between king and people may still be healed, before it becomes utterly incurable. We therefore, in the name of the nation, deeply offended in its majesty by that Bavarian ambassador, who gave his consent to the base protocols of the Diet, and that minister who authorized him to commit this deed, accuse them of high treason against the Bavarian people and the Bavarian constitution; and ask of your majesty that the chambers be immediately convened in order to bring the delinquents to trial.

This also is the reason why we Rhenish Bavarians address ourselves directly to your Majesty—the plighted nation to the plighted king. We require our just rights which they have already begun to take from us. But if we should not obtain them, we at least shall have preserved our honour in the eyes of our own and foreign countries, before the present generation and posterity, and saved ourselves from the imputation of cowardly and passive slaves.

It might perhaps be asked, considering the general terms and vagueness of phraseology of the six articles, what danger do they threaten? But in collating the deeper concealed bearings of the introduction to these articles, three principal points evidently present themselves to the mind of every disinterested reader.

1. In the ancient German Empire, formerly independent and powerful and governed by its States, the cabinets of Austria and Prussia, with Russia in the back ground, are playing the part of dictators. These supporters of absolutism wish to oppress the once free German nation and to govern at their will and pleasure.

2. The sovereignty of the less powerful German princes, including of course Bavaria, is also lost. The former sovereign and constitutional king of Bavaria, becomes the vassal and servant of these three great powers.

3. The constitution of Bavaria, sworn to in the sight of God and the people, is annulled. For if the protocol of the Diet still leave to them the so called chambers, it at the same time deprives them of the privileges of speech and action: these become counsellors not listened to, and legislators laughed at. And lastly, we are still deprived of the only safe-guard of a constitutional government—the free press: for a press under the guardianship of Austria,

Prussia and Russia ceases to be free. We will be silent respecting the unheard of mockery with which the constitutional states of Germany are treated: While in the same moment in which they pierce their charters with the sword of absolutism, they have the audacity to say to their faces: You still have constitutions. At the same time that they are branding free speech and writing with the stamp of high treason, and throw the best writers of the nation into prison, they are promising a new law of the liberty of the press. It fills our hearts with bitter anguish to see from these promises, that they think so poorly of the German nation, as that it should not discover and feel this infamous mockery.

But we shall still venture to ask some questions, the solution of which, if not made by the present generation, we commit to future times and the Eternal Judge of all created beings. Who gives Austria and Prussia the right of usurping the dictatorship over the whole of Germany? Who makes those states the expounders or rather the mutilator of constitutions which are not Austrian nor Prussian? How does the language of their cabinets correspond with the duty sworn to by them of not interfering with the internal concerns of other German States? Shall now the influence of foreign powers define the limits within which free citizens shall be allowed to move, in that country in which the constitution of the Empire fixed the rights of free men.—O Germany how greatly art thou now despised—and none of thy princes feels thy disgrace:—thou, formerly the legislator of Europe, must now see with eyes dimmed with tears, how they throw the garment of slavery around thy shoulders and put thy limbs in fetters. King Louis! Renish Bavaria now invokes you to confront thyself to the arrogance of the oppressive great powers. The Bavarian people will not abandon you: it is ready to conquer or die with you for its honour, for its constitution. But what shall we think if the king of Bavaria strips his crown of its fairest jewel; in eradicating from the hearts of the people their love for their monarch, and to have their holiest feelings trampled upon and scoffed at by foreign usurpers.—O King—Not for the treasures of earth must you give up this jewel: and moreover, never for such equivocal presents as these powers offer to you. What is Austria to us—that old hollow worm eaten trunk! It will be thrown down by the storm and tempest of time, and in its fall crush all who took shelter under its branches. What advantages can Prussia offer to constitutional Bavaria. This false reed which pierces that man's hand who ventures to lean upon it. How will Russia protect Bavaria's rights—that burning Moloch of despotism to whom the father, in pagan delusion, must sacrifice his own child. What support would this deformed Iron Colossus on clay feet be to us.—O King, your people loudly conjure you not to conclude the unhappy alliance with those absolute powers—Put the tempter aside—do not forfeit the love of the Bavarians—do not leave the people in the hour of trial and danger, that you may not too late repent of having rejected them—that when once your foreign vassalage becomes disgusting, the people may not turn away from you, when you invoke their assistance and say, look for help from those in whom you confided more than in the Bavarian people.

King, who know the sanctity of an oath! Have you sworn to fulfil the commands of Austria and Prussia, or are not the words of your royal oath "I swear to uphold the constitution of Bavaria" binding.

We have addressed your Majesty in the language of truth, and conclude with the hope that we shall obtain credit for both loyalty to king and devotion to country. We remain, Your Majesty's faithful constitutional subjects. [*Then follow the names.*]

Whilst on the subject of German affairs, we think it may be useful to place before our readers the subjoined "Table." It will be a good reference in any after discussions, touching the policy and condition and prospects of Germany.

TABLE OF THE GERMAN CONFEDERATION.

STATES.	Capitals.	Population of Capitals.	Superfices in square miles.	Population.	Contingent to the Diet.	Revenue. florins.
Austria.....	Vienna.....	238,177	12,056.00	28,209,709	94,822	160,000,000
Prussia.....	Berlin.....	178,861	5,133.77	10,224,350	79,234	65,000,000
Bavaria.....	Munich....	65,800	1,427.00	3,525,413	35,600	20,000,000
Wurtemberg...	Stuttgart...	23,694	366.50	1,395,462	13,955	16,000,000
Baden.....	Carlsruhe..	13,727	272.59	1,003,630	10,000	5,500,000
Hesse Darmstadt	Darmstadt..	11,320	204.59	619,499	6,195	3,500,000
Hohenzollern...	Hechingen..	2,600	5.12	14,820	145	80,000
Lichtenstein.....	Vaduz.....	1,800	2.45	5,546	55	19,600
Hohenzollern } Sigmaringen }	.....	3,000	18.25	35,560	356	330,000
Hesse Homberg.	Homberg...	2,700	7.84	19,870	200	180,000
Frankfort.....	Frankfort..	40,485	4.87	47,855	475	800,000
Kgdom of Saxony	Dresden....	55,715	352.22	1,192,646	12,000	13,500,000
Saxe Gotha.....	Gotha.....	12,400	54.22	183,682	1,859	1,500,000
Saxe Coburg....	Coburg.....	7,746	26.39	80,012	800	425,000
Saxe Meinengen	Meinengen..	4,120	20.29	54,600	544	350,000
Hildburghausen.	.....	2,503	11.08	29,906	297	200,000
Palatinate of } Reuss..... }	Elder Br'ch.	6,195	6.86	22,255	223	130,000
Ditto.....	Junior Br'ch.....	.....	20.60	52,201	522	420,000
Hesse Cassel...	Cassel.....	18,500	201.58	532,072	5,679	4,000,000
Luxemburgh...	Luxemburg..	.....	.....	.....	2,556	.....
Nassau.....	Wiesbaden..	5,300	104.62	302,769	3,028	1,557,000
Saxe Weimar....	Weimar.....	9,000	67.32	201,000	2,000	1,500,000
Anhalt Dessau..	.....	9,220	17.00	52,647	529	510,000
Ditto Bemberg..	.....	4,844	16.00	37,046	370	450,000
Cœthen.....	Cœthen....	5,074	15.00	32,454	324	230,000
Schwazbourg } Sonderhausen }	.....	4,500	20.40	53,957	539	220,000
Ditto, Rudolstadt	.....	3,922	16.50	45,127	451	275,000
Hanover.....	Hanover...	17,522	701.29	1,305,353	13,000	9,450,000
Brunswick.....	Brunswick..	29,934	71.74	249,527	2,496	1,800,000
Waldeck.....	Anslen.....	1,048	21.68	51,877	519	400,000
Schamb'rg Lippe	.....	2,060	10.10	23,111	230	215,000
Lippe Detmold..	.....	2,369	20.50	69,062	691	466,000
Holstein.....	.....	.....	.....	.....	3,600	.....
Mecklenbourg } Schwerin... }	.....	8,505	219.59	358,378	3,580	1,800,000
Ditto, Strelitz...	.....	4,408	35.95	71,769	718	450,000
Oldenburgh.....	.....	5,222	123.06	217,760	2,170	1,200,000
Lubec.....	.....	25,526	5.45	40,650	407	400,000
Bremen.....	.....	37,725	2.58	48,432	485	420,000
Hamburgh.....	.....	106,000	6.00	123,643	1,298	1,200,000
38 States.						

ARTS AND ARTISTS.

That the fine arts have met with but little encouragement, generally speaking, in this country, will, we believe, be confessed by every person not totally blinded by the effects of prejudice. The fact has, indeed, for many years, been a subject of regret to the man of taste at home, and of triumphant reproach to our enemies abroad. Various have been the causes suggested by different writers, as an apology for this neglect. The form of our government has been accused by some; the manners and pursuits of our citizens, by others. Poverty, again, has been pleaded, on the one hand, as not permitting us properly to reward the labours of the artist—while, on the other, the fellow countrymen of a Trumbull, a Stuart, a West, and a Copely, have been accused of possessing a taste so vitiated, as to render them incapable of deriving gratification from the most brilliant productions of the pencil or chisel. Whether either of the above be the real cause or not, we shall, at present, leave the reader himself to decide; and proceed to a more profitable inquiry. What are the most probable means by which a taste for the fine arts may be more extensively disseminated among our fellow citizens?

Any investigation into the causes which have retarded the progress of these arts among us, can be of advantage to the parties concerned, only so far as it enables us to discover the means of removing the evil complained of; and nothing that as yet appeared on the subject, has, so far as we can perceive, advanced in any considerable degree, towards the much wished for object. Declamation has been bestowed, in profusion, on all hands, but it is a question on which sober reason has seldom indeed been resorted to.

To first cultivate a correct taste for the fine arts, among a people, appears to be the most simple, in fact, the only effectual means of insuring their encouragement; for, so long as this is wanting, the artist must toil in vain. The value of his performances cannot be justly appreciated, when his employers are destitute of the only faculty which can enable them to form a correct judgment of his labours; and glare of colouring, or some quaint peculiarity of style, will in all probability be preferred to the most happy effort of chastened genius.

We would not wish to be understood as insinuating that those among us, who have it in their power to befriend the arts, are entirely destitute of taste, or are wanting in a proper discrimination to direct them to the best means of bestowing their patronage. Yet at the same time, however excellent may be the general taste they do possess, unless it be cultivated by an acquaintance with, and a study of excellent performances in the arts, but little advantage will be derived from it by the latter. Hence, we at once perceive the propriety of encouraging the establishment of Galleries for the collection and exhibition of performances of real merit, in sculpture and painting, not merely to serve as schools for the instruction of our artists, but also for the cultivation of a correct taste in their patron—the public.

An attentive study of Nature herself, would, it is true, in some measure lead to the same result; for it is only from his greater or less adherence to this standard, that the abilities of an artist after all, are to be tested. Yet, there is a manner, a character, and a peculiar detail and expression of subject, which either appears too transitory in nature, or is too familiar to us, when there met with, to strike with a proper degree of force any eye but that of the artist, or experienced connoisseur—hence, it is only in the copies of art that these can be studied at leisure or with profit, by the great mass of spectators. It is only therefore, by comparison, that a just judgment of performances in the arts is to be acquired. We must first learn what should and can be done, before we can ascertain whether the artist has succeeded in any particular performance presented to our eye.

Attempts have been made to establish in some of our cities, Galleries of the nature alluded to, and there now exists among us several public as well as private ones.

Judicious criticism, where the reasons for approving or condemning are distinctly stated, is another and powerful means of favouring the cause of the arts among us. Those minute beauties which escape a superficial view, and those admirable peculiarities which stamp the performances of distinguished masters, can by this means be pointed out, and when once known will serve as landmarks to direct us in the study of the works of others.

Many will perhaps smile, when we assert it as our opinion, that the arts and literature of our country have suffered severely for want of the aid of the labours of the judicious critic; yet we believe it to be a fact, that the indiscriminate and unqualified praise or censure, generally heaped on every performance, the moment it comes before the public, by the friends or enemies of the author, has, more than any other cause, contributed to injure genius in this country.

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THE

JOURNAL OF HEALTH,

AND

RECREATION.

Health—the poor man's riches, the rich man's bliss.

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, DECEMBER, 1832.

[No. 4.]

INTEMPERANCE IN EATING.

Intemperate eating, as already intimated, is perhaps the most universal fault we commit. We are all guilty of it, not occasionally, but habitually, and almost uniformly, from the cradle to the grave. It is the bane alike of our infancy and youth, our maturity and age. It is infinitely more common than intemperance in drinking; and the aggregate of the mischief it does is greater. For every reeling drunkard that disgraces it, our country contains one hundred gluttons—persons, I mean, who eat to excess, and suffer by the practice. It is not contended that all *gourmands* ruin themselves as soon, as certainly, and as utterly, as all *sots* do. But it is believed that the vast superiority of the former, in number, more than counterbalances the superiority of the latter, in faultiness, and throws the preponderance of mischief into the scale of gluttony.* How, indeed can the case be otherwise? while children and youth are admonished against drinking too much, and warned of its immorality and destructive effects, they are regularly taught, and often hired, to over-eat themselves, from their birth. Do you ask me for evidence in proof of this charge? Go to our dining-rooms, nurseries, fruit-shops, confectionaries, and pleasure gardens—go even to sick-rooms, and you will find it in abundance. You will witness there

*The glutton, however his faculties may be impaired by indulgence in his sordid appetite, is not like the drunkard entirely unfitted during the seasons of indulgence, for the discharge of the ordinary business of life. The glutton does not like the drunkard cease at times to be a free agent—a real maniac. The former may degrade himself, but he does not by his intemperate eating degrade and impoverish his family. The one may be useless in society—the other is too often a nuisance—a real curse. The habit of gluttony is less enslaving—is more easily broken than that of drunkenness. All the remarks of the author on the vice of gluttony are, we sincerely believe, strictly correct. But let us not for a moment compare its enormity with that of drunkenness.—

Editors.

VOL. IV.—L

innumerable scenes of gormandizing, not only productive of disease in those concerned in them, but, in many instances, offensive to beholders. The frightful mess often consists of all sorts of eatable materials, that can be collected, and crowded together; and its only measure is the endurance of appetite, and the capacity of the stomach. Like the ox, in rich pasture-ground, or the swine at his swill-trough, men stow away their viands, until they have neither desire nor room for any more. I do not say that such eating matches always and every where occur among us. But I do say that they occur too frequently, and that they form fit subjects for caricature pictures, by European tourists, of our domestic manners. I add, however, that similar scenes present themselves in every country I have visited, where provisions are abundant and cheap. The hungry consume what is set before them, obedient to the keenness and continuance of their desires, rather than to the dictates of reason or experience. The Americans then are not alone the slaves of appetite. The people of every nation that can freely indulge themselves are equally so; and they are equal sufferers by the intemperate practice.

But civilized man often eats from other motives than hunger, and injures himself by the custom. And he is the only animal that does so. While every being of an inferior order takes food in obedience to the cravings of appetite, he, in addition to this, eats for *amusement, for fashion's sake, on account of the savoriness of the article consumed, and from good fellowship, and to oblige a friend.* All that is eaten from these inducements, (and the amount is enormous) is unnecessary for subsistence, and may be correctly charged to the account of intemperance. To convert the superfluous mass of aliment thus swallowed into chyle, is toilsome and debilitating to the digestive organs. Nor is this all. When they have succeeded in their exhausting labour, further mischief arises from the general repletion of the system, which they have produced. Having been compelled, by the superabundance of alimentary matter thrown into them, first to injure themselves, by hard labour, they are compelled next to oppress and injure other parts of the body, by the corresponding superabundance of chyle which they form.

But are the digestive organs always able to convert into chyle, the ponderous and heterogenous mass of food, with which they are thus loaded? Far from it; and hence arises another form of mischief. A party of young people meet by accident, in the evening, at the house of a friend, and the tempting fruits of the season, with luscious preserves, and perhaps a decanter of wine, as a digestive, are set before them. Here commences an eating match, for mere amusement and merriment, each individual present having previously taken the customary evening repast. Yet the quantity consumed is often surprising—sufficient to satisfy the hunger created by a fast. In another instance a much larger party (were not the term inelegant I might call it a *crowd*) meet by invitation, with buoyant spirits, and in their best attire. But fruit alone is not their only

fare. The entire magazine of cookery and confectionary is opened to tempt them. And the temptation succeeds. The amount and multifariousness of palling and indigestible matter passed into the stomach, mingled with lemonade, wine, and liqueurs, is frightful. The digestive organs of the ostrich alone could master it, and turn it to wholesome nourishment. The human organs are unequal to the task. Hence the beginning of mischief and misery. At a late hour the party breaks up, and the members of it return to their homes; but not all of them to the enjoyment of pleasing recollections, or quiet slumbers. Of the members of the small incidental party the same is true. Dyspepsia, in one or another of its various shapes visits many of both parties. One is attacked by a distressing nausea, another by a severe cramp, a third by cholic, a fourth by diarrhœa, and fifth by cholera, while a sixth, falling into a disturbed sleep, is tormented by frightful dreams, or almost smothered by the night-mare. The suffering is great, and in many instances the danger is no less. And all from what cause?—From eating for amusement, and fashion's sake, or because the food is pleasing to the palate. This is no fancy-piece, but a copy from life.

Shall I be told that excessive drinking is much the more faulty and reprehensible of the two, because it deranges the mind, and leads more certainly to other irregularities? That, I reply, is true; but, as some counterbalance to it, excessive eating is the grosser and more bestial. It is further beneath what belongs to humanity, and is, in the same degree, more unworthy of man. The romantic excitement, sportive hilarity, self-complacency, and visions of bliss, which accompany incipient intoxication, offer some temptation to the practice of it,—many think a very strong temptation—if they do not even detract from the magnitude of the fault. But over-eating admits of no palliation. It is essentially and entirely grovelling, unrelieved by any thing ethereal. It begins deliberately, in mere animality, proceeds without wit or song or joyous revelry, and ends in unseemly satiety and hebetude. There is nothing mercurial in it. All is saturnine and repulsive, from beginning to end. It moreover often leads to intemperate drinking. To promote digestion, extinguish a thirst invincible by water, dissipate vapours, and remove the weight that presses like an incubus on the wheels of life, alcohol is resorted to. Some relief from the torpor of repletion being thus experienced, the exciting potion is repeated, and increased in quantity, until ultimately a habit of intoxication is formed. Instances of this sort are too frequent and familiar, to have their existence questioned, or to need a recital.

Am I asked what are the evidences, by which it may be known, and what the injurious effects of excessive eating? I reply, they are numerous and various. Some of its signs, at the close of a meal, are a feeling of satiety, as already mentioned, a sense of gastric weight and fulness, slight stitches or pains in the same region, a disinclination and unfitness for motion of body or action of mind, and a paleness or a flushing of the face, with a strong and growing

inclination to sleep. Those who experience these symptoms, or any of them, soon after dinner, or any other meal, have eaten intemperately, and thereby, to gratify an animal propensity, impaired, for a time, their efficiencies in the discharge of higher duties. And, by the daily repetition of this, they not only consume, in an equivocal and useless state of existence, a large amount of time, but ultimately produce in themselves, and entail on their descendants, disease and suffering. No one, whether sick or well, should gorge himself, at table, until his appetite will receive no more. So far as he does this, he plays the *animal*, forgetful of the *man*—I might have said, to the *disgrace* of the man.

The further evils of intemperance in eating constitute a long and frightful catalogue of maladies, some of them as loathsome and fatal, as any that are incident to human nature. Dyspepsia, hypochondriasis, gout, rheumatism, dropsy, jaundice, colic, cholera, epilepsy and other convulsive affections, madness, shapeless obesity with an approach to idiocy, foul and offensive eruptions on the skin, and successive crops of Lazar-like ulcers, make a part of them. And, to consummate the mischief, these complaints are communicated to posterity. Intemperate meals, moreover, are often the exciting cause of fatal attacks of fever, and even of pestilence. To physicians of experience this truth is abundantly familiar. Nor is it less so, that the relapses which so frequently occur, in convalescence from disease, are usually referable to the same cause. On this ground alone repletion from food is not only a source of great suffering, but a wasteful outlet of human life. In fine; by excessive and luxurious eating, many persons convert themselves into gross and useless masses of animality, retaining but little of man about them, except the bloated and dishonored form—Intellectual and corporeal vigour is alike extinguished in them, and even their moral qualities are lamentably obscured. Such is gluttony, except that the reality surpasses the picture, in all that is odious.—*Caldwell on Intemperance.*

BENEVOLENT INSTITUTIONS OF THE NETHERLANDS.

The Benevolent Institutions of the Netherlands may be classed under the three following heads:

- 1st. Institutions which afford pecuniary aid.
- 2d. Institutions tending to diminish the number of the poor.
- 3d. Institutions which tend to prevent poverty.

The first class of these institutions are either local or for the whole kingdom. In the year 1827 there were of the first as follows:

* The following calculations and statements apply to the kingdom of the United Netherlands, previous to the separation now recognized between Holland and Belgium.—*Eds.*

	Rendering aid in their own homes.	Distributing food.	Maternal charity.	Hospitals.
Number of Institutions	5640	47	6	724
Individuals Relieved	755621		1557	41748
Expenses of the Institutions	716531 <i>f.</i>	2231	14686	951518
Relief of every Species	4990363	102201		3296483
Revenue in Property	3017670	886	1578	2930024
Subscriptions and Gifts	0	76085	9392	—
Collections	1295096	1946	419	461797
Subsidies of the Communes	1464403	24848	3600	808775
Subsidies of the Provinces or State	5275	—	—	82652

Of every 1000 inhabitants of the Netherlands, there are 122 to 123 who receive charitable aid at their homes; nearly the half of these are in the cities. The charges and expenses of administration is for each individual 0,95 florins, the amount in charity 6,60 *f.* The Societies that distribute aliment and fuel during winter have 8976 subscribers, and distribute 1692147 rations of soup, 22847 pounds of bread and 439 measures of potatoes, &c. The six maternal institutions are at Verviers, Ghent, Haarlem, Rotterdam, Leyden and Groningen. Of the 41748 persons who receive succor in the hospitals 38827 belong to the cities. This population is composed of 7449 sick, 15002 old and infirm, and 19197 children. The expense of the institution amounts to 22,79 florins for each person, and of the support and nourishment to 78,96, total 101,75 florins. There exists still 5 societies, which furnish succor to 24600 modest poor persons, at an expense of 10,310 florins. With respect to the institutions for the whole kingdom, they consist principally of the military hospital at Leyden, and the hospital at Malines open to the daughters of soldiers who have been disabled or died in the service. The last institution contains 140 individuals. The first has afforded relief to 2178.

In 1827 the following institutions existed for diminishing the number of the poor.

	Number.	Numbers relieved.	Expense.
1st Class Schools, specially for the poor	262	56950	237883 <i>fl.</i>
2d Class do. where the poor are admitted	3782	88987	133171
3d Class do. gratuitous - - -	251	26535	unknown
Schools for labour - - - - -	50	2514	25287
Charitable Workshops - - - - -	32	6860	328548
Depots of Mendicity - - - - -	7	2943	234698
Colonies of the Benevolent Societies - -	11	8140	1516415
Establishments for Deaf and Dumb - -	4	249	42095
do. for the Blind - - - -	1	40	12103

Of the children in schools, especially for the poor, 51936 belong to the cities. The second class of schools are chiefly in the rural communes. The third class of schools are either weekly, Sunday or Infant, the latter for children under six years of age. In the

schools for labour, girls only are admitted. These schools are in northern Brabant, Guilders, Flanders, Zealand and Antwerp.

The workshops are not found in all the provinces, they are under the care of directors. Five of the colonies of the Benevolent Societies, called free, contain 541 habitations. The six others are composed of seven establishments for orphans, foundlings and beggars, they have 63 auxiliary buildings and 45 farms with their appurtenances. The population is composed of 3485 individuals living in families, of 2076 orphans or foundlings, and of 2,579 mendicants. The establishments for the deaf and dumb are at Ghent, Liege, and Groningen, and that for the blind at Amsterdam. We may add to the above institutions the Society for the Moral Amelioration of Prisoners, which comprises 5072 members, and the cares of which extend over 600 prisoners.

The institutions which tend to prevent indigence may be classed as follows:

		Number.	Individuals concerned.	Expenses.
Monts-de-Piete Communal	-	108	128570	7417354 fl.
Farming	-	74	5656	—
Banks for Mutual Benefit	-	443	69025	287914
Pensions to Widows	-	26	13000	225000
Savings	-	53	13882	1047890

The monts-de-piete directed on account of the Communities or the benevolent institutions have received 2,215,755 deposits in 1827, 2,011,772 have been taken up, and 120,609 sold. The same items have been for the farmer's monts, 877,395—668,302; and 41,280. The banks for mutual benefit, that for the sick, and for defraying the expenses of funerals, have generally afforded their relief to 15,726 individuals who received each to the value of 18 florins 31 cents, and the expense to those who received benefit is 4,17 florins. The benevolent institutions amount in all, without comprising the society for ameliorating the condition of prisoners, and the banks for pensions to widows and orphans, to 11,440. The number of individuals who participate in their benefits is 1,214,055, and the entire expense attending them amounts to 12,821,359 florins. Now if we consider that the population of this Kingdom was in 1827, 6,166,854 souls, there results from what proceeds that in the Netherlands every fifth inhabitant receives some succour from them. This proportion is rendered thus great, however, from the fact, that many individuals receive succour from several of the benevolent institutions at the same time, and thus, one individual is numbered many times in making up the total.

The foregoing particulars are derived from the Correspondence, Mathematical and Physical, published at Brussels by M. A. Quetelet. The monts-de-piete alluded to above, appear to be institutions for loaning money to individuals in distress, on deposits at a small and regular interest; the articles being reclaimable on paying the amount deposited upon them within a certain fixed period.

SPECTRAL ILLUSIONS.

The subject of Spectral Illusions is not merely interesting as a part of intellectual philosophy, but as exercising no little influence on the health and peace of mind of a great many individuals. It is so plainly and pleasantly set forth by Doctor Abercrombie,* that we have thought we could not do better than give it in his own language, persuaded that our readers will experience the same pleasure as we did ourselves from its perusal. The facts are arranged by the author under the following heads.

I. False perceptions, or impressions made upon the senses only, in which the mind does not participate. Of this class there are several modifications, which have been referred to under the subject of Perception. I add in this place the following additional examples:—A gentleman of high mental endowments, now upwards of eighty years of age, of a spare habit, and enjoying uninterrupted health, has been for eleven years liable to almost daily visitations from spectral figures. They in general present human countenances; the head and upper parts of the body are distinctly defined; the lower parts are, for the most part, lost in a kind of cloud. The figures are various, but he recognises the same countenances repeated from time to time, particularly of late years that of an elderly woman, with a peculiarly arch and playful expression, and a dazzling brilliancy of eye, who seems just ready to speak to him. They appear also in various dresses, such as that of the age of Louis XIV.; the costume of ancient Rome; that of the modern Turks and Greeks; but more frequently of late, as in the case of the female now mentioned, in an old-fashioned Scottish plaid of Tartan, drawn up and brought forward over the head, and then crossed below the chin, as the plaid was worn by aged women in his younger days. He can seldom recognise among the spectres any figure or countenance which he remembers to have seen; but his own face has occasionally been presented to him, gradually undergoing the change from youth to manhood, and from manhood to old age. The figures appear at various times of the day, both night and morning; they continue before him for some time, and he sees them almost equally well with his eyes open or shut, in full daylight or in darkness. They are almost always of a pleasant character, and he seems to court their presence as a source of amusement to him. He finds that he can banish them by drawing his hand across his eyes, or by shutting and opening his eyelids once or twice for a second or two; but on these occasions they often appear again soon after. The figures are sometimes of the size of life, and sometimes in miniature; but they are always defined and finished with the clearness and minuteness of the finest painting. They sometimes appear as if at a considerable distance, and gradually approach until they seem almost to touch his face; at other times

* *Inquiries concerning the Intellectual Powers, and the Investigation of Truth.* (Harper's Family Library, No. XXXVII.)

they float from side to side, or disappear in ascending or descending. In general, the countenance of the spectre is presented to him; but on some occasions he sees the back of the head, both of males and females, exhibiting various fashions of wigs and headdresses, particularly the flowing full-bottomed wig of a former age. At the time when these visions began to appear to him, he was in the habit of taking little or no wine, and this has been his common practice ever since; but he finds that any addition to his usual quantity of wine increases the number and vivacity of the visions. Of the effect of bodily illness he can give no account, except that once, when he had a cold and took a few drops of laudanum, the room appeared entirely filled with peculiarly brilliant objects, gold and silver ornaments, and precious gems; but the spectral visions were either not seen or less distinct. Another gentleman, who died some time ago at the age of eighty, for several years before his death never sat down to table at his meals without the impression of sitting down with a large party dressed in the fashion of fifty years back. This gentleman was blind of one eye, and the sight of the other was very imperfect; on this account he wore over it a green shade, and he had often before him the image of his own countenance, as if it were reflected from the inner surface of the shade. A very remarkable modification of this class of illusions has been communicated to me by Dr. Dewar of Stirling. It occurred in a lady who was quite blind, her eyes being also disorganized and sunk. She never walked out without seeing a little old woman with a red cloak and a crutch, who seemed to walk before her. She had no illusions when within doors.

II. Real dreams, though the person was not at the time sensible of having slept, nor, consequently, of having dreamed. A person, under the influence of some strong mental impression, drops asleep for a few seconds, perhaps without being sensible of it; some scene or person connected with the impression appears in a dream, and he starts up under the conviction that it was a spectral appearance. I have formerly proposed a conjecture by which some of the most authentic stories of second sight may be referred to this principle; others seem to be referable to the principle to be mentioned under the next head. Several cases mentioned by Dr. Hibbert are also clearly of the nature of dreams. The analogy between dreaming and spectral illusions is also beautifully illustrated by an anecdote which I received lately from the gentleman to whom it occurred, an eminent medical friend. Having sat up late one evening, under considerable anxiety about one of his children, who was ill, he fell asleep in his chair, and had a frightful dream, in which the prominent figure was an immense baboon. He awoke with the fright, got up instantly, and walked to a table which was in the middle of the room. He was then quite awake and quite conscious of the articles around him; but close by the wall, in the end of the apartment, he distinctly saw the baboon making the same horrible grimaces which he had seen in his dream; and the spectre continued visible for about half a minute.

III. Intense mental conceptions so strongly impressed upon the mind as for the moment to be believed to have a real existence. This takes place when, along with mental emotion, the individual is placed in circumstances in which external impressions are very slight; as solitude, faint light, and quiescence of body. It is a state closely bordering upon dreaming, though the vision occurs while the person is in the waking state. The following example is mentioned by Dr. Hibbert:—A gentleman was told of the sudden death of an old and intimate friend, and was deeply affected by it. The impression, though partially banished by the business of the day, was renewed from time to time by conversing on the subject with his family and other friends. After supper, he went by himself to walk in a small court behind his house, which was bounded by extensive gardens. The sky was clear, and the night serene; and no light was falling upon the court from any of the windows. As he walked down stairs, he was not thinking of any thing connected with his deceased friend; but when he had proceeded at a slow pace about half-way across the court, the figure of his friend started up before him in a most distinct manner at the opposite angle of the court. “He was not in his usual dress, but in a coat of a different colour, which he had for some months left off wearing. I could even remark a figured vest which he had also worn about the same time; also a coloured silk handkerchief around his neck, in which I had used to see him in a morning; and my powers of vision seemed to become more keen as I gazed on the phantom before me.” The narrator then mentions the indescribable feeling which shot through his frame; but he soon recovered himself, and walked briskly up to the spot, keeping his eyes intently fixed upon the sceptre. As he approached the spot it vanished, not by sinking into the earth, but seeming to melt insensibly into air.*

A similar example is related by a most intelligent writer in the *Christian Observer* for October, 1829:—“An intimate friend of my early years, and most happy in his domestic arrangements, lost his wife under the most painful circumstances, suddenly, just after she had apparently escaped from the dangers of an untoward confinement with her first child. A few weeks after this melancholy event, while travelling during the night on horseback, and in all probability thinking over his sorrows, and contrasting his present cheerless prospects with the joys which so lately gilded the hours of his happy home, the form of his lost relative appeared to be presented to him at a little distance in advance. He stopped his horse, and contemplated the vision with great trepidation, till in a few seconds it vanished away. Within a few days of this appearance, while he was sitting in his solitary parlour late at night, reading by the light of a shaded taper, the door, he thought, opened, and the form of his deceased partner entered, assured him of her complete happiness, and enjoined him to follow her footsteps.” This second appearance

* Hibbert on Apparitions, p. 479. *Second edition.*

was probably a dream; the first is distinctly referable to the principles stated in the preceeding observations.

An interesting case referable to this head is described by Sir Walter Scott, in his late work on *Demonology and Witchcraft*:—"Not long after the death of a late illustrious poet, who had filled, while living, a great station in the eye of the public, a literary friend, to whom the deceased had been well known, was engaged during the darkening twilight of an autumn evening in perusing one of the publications which professed to detail the habits and opinions of the distinguished individual who was now no more. As the reader had enjoyed the intimacy of the deceased to a considerable degree, he was deeply interested in the publication, which contained some particulars relating to himself and other friends. A visiter was sitting in the apartment, who was also engaged in reading. Their sitting-room opened into an entrance-hall rather fantastically fitted up with articles of armour, skins of wild animals, and the like. It was when lying down his book, and passing into this hall, through which the moon was beginning to shine, that the individual of whom I speak saw right before him, and in a standing posture, the exact representation of his departed friend, whose recollection had been so strongly brought to his imagination. He stopped for a single moment, so as to notice the wonderful accuracy with which fancy had impressed upon the bodily eye the peculiarities of dress and posture of the illustrious poet. Sensible, however, of the delusion, he felt no sentiment save that of wonder at the extraordinary accuracy of the resemblance, and stepped onwards towards the figure, which resolved itself as he approached into the various materials of which it was composed. These were merely a screen occupied by great-coats, shawls, plaids, and such other articles as usually are found in a country entrance-hall."

On this part of the subject I shall only add the following example, which I have received from Dr. Andrew Combe:—A gentleman, a friend of his, has in his house a number of phrenological casts, among which is particularly conspicuous a bust of Curran. A servant-girl belonging to the family, after undergoing great fatigue, awoke early one morning, and beheld at the foot of her bed the apparition of Curran. He had the same pale and cadaverous aspect as in the bust, but he was now dressed in a sailor's jacket, and his face was decorated with an immense pair of whiskers. In a state of extreme terror she awoke her fellow-servant, and asked whether she did not see the spectre. She, however, saw nothing, and endeavoured to rally her out of her alarm;—but the other persisted in the reality of the apparition, which continued visible for several minutes. The gentleman, it appears, keeps a pleasure yacht, the seamen belonging to which are frequently in the house. This, perhaps, was the origin of the sailor's dress in which the spectre appeared; and the immense whiskers had also probably been borrowed from one of these occasional visitors.

To the same principle we are probably to refer the stories of the apparitions of murdered persons haunting the murderer, and he was

driven to give himself up to justice: many examples of this kind are on record. Similar effects have resulted in other situations from intense mental excitement. A gentleman, mentioned by Dr. Conolly, when in great danger of being wrecked in a boat on the Eddystone rocks, said he actually saw his family at the moment. In similar circumstances of extreme and immediate danger, others have described the history of their past lives being represented to them in such a vivid manner, that at a single glance the whole was before them, without the power of banishing the impression. To this head we are also to refer some of the stories of second sight,—namely, by supposing that they consisted of spectral illusions arising out of strong mental impression, and by some natural coincidence fulfilled in the same manner as we have seen in regard to dreams. Many of these anecdotes are evidently embellished and exaggerated; but the following I have received from a most respectable clergyman, as being to his personal knowledge strictly true: In one of the Western Isles of Scotland, a congregation was assembled on a Sunday morning, and in immediate expectation of the appearance of the clergyman, when a man started up, uttered a scream, and stood looking to the pulpit with a countenance expressive of terror. As soon as he could be prevailed on to speak, he exclaimed, “Do you not see the minister in the pulpit dressed in a shroud!”—A few minutes after this occurrence the clergyman appeared in his place, and conducted the service, apparently in his usual health; but in a day or two after was taken ill and died before the following Sunday.

The effect of opium is well known in giving an impression of reality to the visions of conception or imagination: several striking examples of this will be found in the Confessions of an Opium-Eater. These are in general allied, or actually amount to the delusions of delirium, but they are sometimes entirely of a different nature. My respected friend, the late Dr. Gregory, was accustomed to relate a remarkable instance which occurred to himself. He had gone to the north country by sea to visit a lady, a near relation, in whom he felt deeply interested, and who was in an advanced state of consumption. In returning from the visit, he had taken a moderate dose of laudanum, with the view of preventing sea-sickness, and was lying on a couch in the cabin, when the figure of the lady appeared before him in so distinct a manner that her actual presence could not have been more vivid. He was quite awake, and fully sensible that it was a phantasm produced by the opiate, along with his intense mental feeling, but he was unable by any effort to banish the vision.

Some time ago I attended a gentleman affected with a painful local disease, requiring the use of large opiates, but which often failed in producing sleep. In one watchful night there passed before him a long and regular exhibition of characters and transactions, connected with certain occurrences which had been the subject of much conversation in Edinburgh some time before. The characters succeeded each other with all the regularity and vivid-

ness of a theatrical exhibition: he heard their conversation and long speeches that were occasionally made, some of which were in rhyme; and he distinctly remembered, and repeated next day, long passages from these poetical effusions. He was quite awake, and quite sensible that the whole was a phantasm; and he remarked that when he opened his eyes the vision vanished, but instantly reappeared whenever he closed them.

ITEMS CONCERNING MEATS AND DRINKS.

Saccharine Aliment.—Dr. Prout considers the principal alimentary substances as reduceable to three great classes, the *Saccharine* the *Oily*, and the *Albuminous*. The first of these, with certain exceptions, includes the substances in which according to Gay-Lussac and Thenard, the oxygen and hydrogen are in the same proportion as they are in water. They are principally derived from the vegetable kingdom, and being at the same time *alimentary*, Dr. Prout considers the terms *Saccharine principle* and *Vegetable aliment* as synonymous. The following, shewing some of the results of Dr. Prout's experiments with various substances, great care being taken in every case to obtain these perfectly pure, will interest many of our readers, as shewing the comparative nutritive properties of each.

	Carbon.	Water.
SUGAR. Pure Sugar Candy contains	42.85 pr. ct.	57.15
Impure Sugar Candy	41.15 to 42.15	58.50 to 57.50
East India Sugar Candy	41.90	58.10
English Refined Sugar	41.50 to 42.50	58.50 to 57.50
East India Refined Sugar	42.20	57.80
Maple Sugar	42.10	57.90
Beet-root Sugar	42.10	57.90
East India moist Sugar	40.88	59.12
Sugar of Narbonne honey	36.36	63.63
Sugar from Starch	36.20	63.80
STARCH. Fine wheat Starch	37.50	62.50
The same dried	42.80	57.20
highly dried	44.	56.
Arrow root	36.40	63.60
The same dried	42.80	57.20
highly dried	44.40	55.60

Loss of Weight in Meat during Cooking.—Four pounds of beef lost by boiling one pound; the same quantity lost by roasting one pound five ounces; the same quantity lost in baking one pound three ounces. Four pounds of mutton lost in boiling fourteen ounces: the same quantity by roasting lost one pound six ounces; by baking the same quantity lost one pound four ounces.

Consumption of Beef in France.—According to M. Lullin de Chateavieux, it appears that the consumption of *Beef* in France, in proportion to the population is only one-sixth of what it is in England, notwithstanding that during the year 1826 no fewer than

36,518 oxen and cows were imported from foreign countries. During the same period the importation of sheep and lambs amounted to 200,000. According to M. Dupin, there is consumed in England three times as much meat, milk and cheese, as in France.

Port Wine.—The eulogists of pure Port Wine may be a little startled at the following official statement of the entire amount of wine exported for eight years from Oporto.

In 1818, the Factory wine exported from Oporto, amounted to 32,843 pipes; of this quantity 32,465 were consumed by Great Britain and her dependencies, leaving 378 pipes to supply all the rest of the world with pure port wine.

In 1819, the total quantity exported was 19,502 pipes, of which nearly the whole was for the supply of Great Britain.

In 1820, the quantity exported was 23,740 pipes; almost the whole went to supply Great Britain.

In 1821, 24,641 pipes; nearly the whole to Great Britain.

In 1822, 27,758 pipes; of which 27,470 were consumed by the English, leaving 288 pipes for the supply of all other nations.

In 1823, 23,578 pipes were exported; of which 23,208 were for the supply of England, leaving 370 for other nations.

In 1824, 19,164 pipes were the number exported, the same proportion being consumed by Great Britain.

In 1825, 40,524 pipes exported, of which 40,277 were for the supply of Great Britain, and 247 for other nations.

In 1826, 18,604 pipes exported, 18,310 to Great Britain, and the remaining 314 to other countries.

Port Wine of the Shops.—The following is stated on unquestionable authority to be the composition, detected by analysis, of a bottle of the ordinary port wine of the shops. Spirits of wine three ounces; cider 14 ounces; sugar one and a half ounce; alum two scruples; tartaric acid one scruple; strong decoction of logwood four ounces.

Consumption of Wine in France.—In 1821, the quantity of French wines retailed in France, and of course chiefly consumed by the poorer classes amounted to more than 335,000,000 gallons. In 1826, it exceeded 400,000,000 gallons. The quantity sold wholesale, and consequently consumed by the families of the opulent, or at least those in easy circumstances, amounted in 1826 only to 69,314,650 gallons; in 1828, to 136,869,438 gallons.

Consumption of French Wines by Foreign Nations.—According to M. Paguirre, England uses less of the French wines than almost any other nation if we except Sweden. In five years, 6,681 tons of French wines were admitted into England. Hamburgh alone takes about eight times, and Holland upon an average twelve times as much.

LAWS FOR THE INTERMENT OF THE DEAD.

The philosopher, who studies the errors of man, will not find the display of his passions least absurd, with respect to the disposal of the dead. The strongest minded man may, after death, become an unresisting puppet in the hands of false sentiment, caprice, fashion, and superstition. If we deride other nations—if we smile at the Abyssinian, who, as soon as his relative is supposed to be dead, hermetically seals his mouth and nostrils, &c. &c.—we shall find also, upon inquiry, that many civilized nations are not less singular in other respects. The fulsome mummeries and inexplicable customs of some other European nations, though revolting to good sense, Christian humility, and belief, are, nevertheless, harmless pieces of vanity, compared with the pride, which, in this country, lays claim, at the expense of the living, to place and distinction, even for the tenant of the grave. For a striking instance of this pernicious absurdity, we need go no farther than the new church of M——. For the sum of thirty pounds, we may there purchase the privilege of poisoning the living, with the body of some departed relative. The body is laid on a trap-door, which (as an apology for the solemnity of “Dust to dust”) is strewn with a little sand. It then descends with its load to the bottom of the vault:—porters start from their hiding-places below, and as quickly disappear with their prize; and when the noise and bustle of their operations have subsided, you are invited into the depths of this fashionable “Avernus,” to see the remains of your friend, duly exalted above the coffins of his predecessors. All that is indecorous at the moment, and prejudicial afterwards, may be avoided, by obeying, to the letter, the awful words of the service—(which convey more than one emphatic meaning)—“Earth to earth.”

Errors, such as these, fall immediately within the scope of our subject—but not all errors—not those which relate to prejudices against the examination of the dead, or to the dissections of the anatomist;—prejudices that impede the advance of scientific knowledge, and have given rise to crimes unprecedented in the annals of iniquity.

All the civilized nations of antiquity have condemned the custom of interment in cities. Wherever he travels, the antiquarian finds in the environs of the great ancient cities, tumuli, necropolis, funeral temples, vaults, excavations in caverns, masses of masonry of the most astounding magnitude, such as the pyramids,—wonders of the old world, that appear to have survived the wreck of ages, to teach us an important lesson—a lesson, however, as yet unattended to in this country.

The mummies of Egypt, with their elaborate hieroglyphic legends—their preservation by gums, aromatics, and absorbent earths—offer us another example; how honour to the dead was

made compatible with the safety of the living.* Sculpture has perpetuated the beautiful forms of urns; and classical history, the description of the funeral piles, whose cinders furnished their sacred contents. Among the Romans, the laws of the Twelve Tables bore "*Hominem mortuum in urbe ne sepelito, neve urito.*"

The neglect of such salubrious laws never fails to produce serious consequences. The Hindoo laws, of such high antiquity, prescribe the burning of bodies, before being thrown into the sacred river; which now being incompletely done, putrefaction is still generated, adding to the deadly effects of the marshes near the Ganges.

In farther illustration of this subject, we may cite the reports of the French physicians, Messieurs Hamont and Parriset, who were expressly deputed to Egypt by the French government, to investigate the nature of the plague. It is their opinion, that the very superficial mode of interment that prevails there, materially contributes to it. At almost every village, they found, near the habitations of the Arabs, mounds crumbling away, and exhibiting the naked bones of those who had been buried in them.

In the whole of Lower Egypt, corpses are merely thrown on the surface of the earth. A hillock is raised over them, which is quickly demolished, or cracks in drying—while infectious vapours escape through the fissures, or flies are admitted to the bodies. The sting of these insects will subsequently produce pestilential tumours, of which many of the natives have been known to die.

Modern nations are no less decided, in their condemnation of the practice of interment within the precincts of cities. Their funeral monuments testify this, no less than those of the ancients. We need scarcely mention the Pere la Chaise, near Paris—the Campo Santo, near Naples—the Vale of Death, near Constantinople, &c. &c.

What a contrast do our English habits present! Cemeteries, in the most populous places, elevated in consequence of their limited extent of space, several feet above the pavements—and coffins, so close together, that the sexton is compelled to probe the ground, before he begins to excavate, to see whether the soil is sufficiently decomposed!

But the interment in churches is even more to be deprecated, than all the circumstances we have stated. Vainly do the undertakers enclose the body in two coffins: supposing the lead hermetically sealed (as it should be), in the decomposition of the body, elements are evolved, and combine, of sufficient power sometimes to burst, at others to corrode, the coffin; and the subtle effluvium escapes at a time when it has become most active, from long imprisonment.

* This custom among the Jews, in the time of the Redeemer, is thus alluded to in the Holy Scriptures: St. John, chap. xix. ver. 39, 40. "And there came also Nicodemus, * * * and brought a mixture of myrrh and aloes, about an hundred pound weight. Then took they the body, * * * and wound it in linen cloths, with the spices, as is the manner of the Jews to bury."

“Non sempre i sassi sepolcrali ai tempi
 Fean pavimento, ne agl'incenso avvolto
 Dei cadaveri il lezzo, i supplicanti
 Contaminò.”*

Churches are exposed no less than other buildings we have mentioned, to the generation of insalubrious atmosphere, when crowds are assembled together in the hot season of the year. When to this source of mischief is superadded the subtle emanations from the dead, what may not be the amount of evil, although perhaps operating at a remote period! Mr. St. John has remarked, “Our dead are interred in our temples, and putrid exhalations float, like a desolating mist, through those aisles which should be sacred to praise alone. Men feel a sinking of the spirit on entering them; but it is caused not by any accession of penitential feelings, but by inhaling a fetid, unwholesome atmosphere; and through life they associate a certain cadaverous scent with every reminiscence of a church.”

We shall now give a few instances of the effects of effluvia from dead bodies.

In Dr. Johnson's work on Tropical Climates, we find, that a man dying in a ship then in China, and his companions taking his body to the banks of the river, to be buried, at the first stroke, the spade of one of the diggers entered a coffin, from which so strong an effluvia escaped, as to strike down the two nearest men, who ultimately died.

We cannot afford space to relate all the accidents of a similar nature that occurred at the beginning of the French revolution; when, on account of the insalubrity of the church and neighbourhood of the cemetery of the Innocents, the government determined to have the remains of the bodies removed. M. Thouret himself, who was director of these operations, narrowly escaped death from a putrid fever which he contracted in the performance of his duties. Those who only refer to works of general literature, will find an interesting account of the accidents that occurred on this occasion, in M. de Chateaubriand's “*Genie du Christianisme*.”

Three workmen died, who had entered the vault of a church at Montpellier, in 1749; a rapid flight saving a fourth, who had accompanied them.

The bodies in the burial ground of St. Eustache, in Paris, were moved in 1749; and of a number of children, who were proceeding to the church, to be questioned in their catechism, some fell down in a state of syncope, whilst others were subjected to other indispositions.

At Saulieu, in Burgundy, in 1773, and at Nantes, in 1774, great

* Ugo Foscolo—*I Sepolcri*. These lines have been translated thus:—

“Not in wise times the cemeteries dank
 Were laid beneath the churches' floors, and gorged
 Till the believers shudder'd at the stench,
 Strangling the incense fumes, and kneel'd in terror.”

numbers of persons attending divine service were attacked with most serious diseases, in consequence of the bursting of coffins of persons interred in the church.

These, and numberless other instances that might be quoted, induced the French government to prohibit interments in the town; and it was once in contemplation, to burn dead bodies, according to the custom of the ancient Romans.

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In a country continually advancing to refinement, and in which ingenuity is tasked to devise new schemes for increasing the power of machinery, and saving the labour of hands, there is a necessary tendency to deterioration of bodily vigour and activity. The system of mutual assistance and assurance, which men reciprocally give in the crowded mart of commerce, and amid the din of manufactures, is matured, always, at the expense of individual prowess and freedom of personal movement. We are still swayed by the prejudices inherited from the olden time; when the peasant tilling the soil, the monk or recluse in his convent, and the soldier alternately defending and attacking the other two, were thought to represent the great body of society. Clown and countryman, are still, to common apprehension, convertible terms, with which, also the idea of ignorance is too readily associated. Those destined for the learned professions, and *litterati* and *savans*, in general, are educated even at this day, too much in the monkish fashion; and their pursuits are supposed to partake so largely of meditation and reading, that they may dispense with that activity of life required for the possession of full health and bodily strength. Men devoted to arms, are still in the public eye excused from many observances and mental occupations, on the plea of these being incompatible with the frank and noble bearing and plain speech of the gallant soldier. Though all these be, to the philosophic observer, vulgar errors, they are not the less tenaciously adhered to by a large class of persons, who would not like to be called ignorant or prejudiced.

We know of no better means of dispelling these errors, than by showing on a large scale, what the world has always had examples of in individual cases; viz: that labour by one's own hands is not incompatible with the attainment of a knowledge of the sciences and of humane letters: and that in fact no system of education is

complete, in which the training and exercise of both body and mind, by joining gymnasia and workshops and land for agriculture to schools and colleges, are not carried on concurrently.

Our readers will have seen in preceding pages, an extract from the little work of Mr. Belinaye, Surgeon, on *The Sources of Health and Disease in Communities, or Elementary Views of Hygiene, &c.* The author makes no pretensions to originality of view, nor to profundity of research. In a subject like the one he discusses, it is much better to dwell on with emphasis, and set forth, by varied illustration, known and admitted, but not generally practiced truths, than to attempt to engage attention by startling paradox or equivocal discovery.

After an introduction, in which the utility of public hygiene is proved, and its neglect in England acknowledged and animadverted on, the work is divided into the following heads: 1. *Subserviency of Man to Physical Influences*; 2. *Laws of Propagation*; 3. *Emanations*; 4. *Effluvia*; 5. *Civilization*. If we except his advancing occasionally a doubtful or exploded hypothesis to explain certain facts and phenomena, Mr. Belinaye has executed his task accurately and pleasantly. When speaking of hereditary diseases and of the necessity of care in choosing a companion in marriage, he says truly enough—

“All physical peculiarities, in a word, in the parents, are hereditary; the *age* of the father is hereditary; and we may trace in the unconscious infant, even the lines of that care which is ushering the decrepit parent to the grave, but to which its happy age is as yet a stranger.”

On marriage his remarks are all worthy of attentive perusal. We have only room for the following:

“The Christian religion by consecrating monogamy as the law of the faithful, not only promoted the surest means of civilization, but also of the increase and physical improvement of the human race. Marriage, thus hallowed by the most enlightened of systems, produces in its turn, all the elements necessary to the civil government of states, and to their physical strength—an effect which no other union of the sexes can achieve. But to obtain these results, there must be a freedom of choice, and certain physical conditions, observed in the conjugal compact, most of which fall within the scope of our particular views.”

The drama and theatrical exhibitions exert too important an influence over the manners and morals of a people, to allow of their

being either dogmatically stigmatised as pernicious, or unmeaningly eulogised as a means of teaching virtue and morality. Whatever of good or evil can be said of narrative and descriptive poetry in general, will apply to dramatic poetry, read in our closet or in the domestic circle. Whatever in the latter is vicious, acquires more power to injure; as, on the other hand, what is moral and good in it has more season and effect, when uttered with suitable action and scenic accompaniments on the stage, by persons representing the various characters whom the poet had introduced as interlocutors in the piece. Now comes the contest between the admirers and the disparagers of the drama: the former dwelling on the passages which express patriotism, self-denial, generosity, pure and elevated love, &c.—the other pointing out numerous lines, the recitation of which, must either call up the blush of shame or excite the latent sensibilities to pruriency of feeling, and lawless passion; or if laughter be elicited it is more frequently at knavery and deceit or the antics of drunkenness. So far the arguments on both sides are plausible—perhaps, and we would fain believe in this opinion, they preponderate in favour of stage exhibitions of the regular drama.—But when the enemies of the play-house call attention to a class of persons who regularly frequent the theatre, and for whom special provision seems to be made, and to the facility for intoxication, and to the not unfrequent scenes of immodesty and brawl in the lobbies and anti-rooms, and then challenge us for proof of the good, or moral, or useful tendency of the theatre, we must be silent, or in candour join with them in saying, that the drama ought to be abandoned to reprobation, unless we separate the drama strictly so called, from the drama with its associate scenes and persons at theatres; and while holding to it, abandon the rest, until refined of their abuses and purified of their corruptions. We have been led into this train of thought by a hasty perusal of Mr. *William Dunlap's History of the American Theatre*, lately issued from the press of the Harpers', New York. To many readers, this work possesses an interest different from that which attracted us to it. As a history of the stage, of players and of managers—difficulties, receipts and losses, we cannot say that we have derived much benefit or instruction from it. Here and there, however, we met with passages which are acknowledgments—the more valuable, because coming from a gentleman who has written much for the stage, who has been manager of a theatre, who has associated largely with actors, and who still thinks that “the theatre is in itself a powerful engine well adapted to the improvement of man, and that

it only wants the directing hand of an enlightened society to make it the pure source of civilization and virtue." p. 2.

Of the manner in which this directing hand should be employed, we are allowed to understand from the following:

"While a tier of boxes is appropriated as a gallery to display the allurements of vice, while the actor looks for his reward from the popularity he can establish with the million, and the manager must please the vulgar or shut his theatre,—the stage is not a school for morality; it is mockery to call it so. By its nature, and the powers it possesses, it is fitted to be one of the most effective." p. 277.

On the subject of the too common addiction of actors to the bottle, and the false light in which drunkenness has been exhibited on the stage, Mr. Dunlap's language is not less appropriate than true.

"Mr. Cain, for some time considered the rival of Mr. Wood in Philadelphia, was born at Deptford, near London, but was educated in the neighbourhood of Burlington, New Jersey, and generally considered an American candidate for fame; while Wood, an American was thought a foreigner. Mr. Cain was young, handsome, with 'health, a remarkable juvenile appearance, fine voice and ability; advantages,' says Mr. Wood, 'which nothing but the actor's bane, brandy could have deprived him of.' He was idle—the last is the inevitable consequence of the first.

"To publish a list of the victims to brandy or intemperance, who have fallen under the writer's view, and were among the professors of the histrionic art, would at first glance appear as a libel on the theatres. But if examined in connexion with the list, the same writer could present, of those who had fewer seductive inducements, and stronger incitements to virtuous conduct, and yet have fallen, the melancholy truth would appear that, throughout society in England and America, the indulgence in drunkenness—let the vile thing have its vile name—has been frightful. May the blessings of mankind, and the reward of well doing, rest on those who have rendered the vice as infamous as it is loathsome and destructive.

"Has the theatre done its part, as a school of morality, to check this evil? No. It has been represented in plays as a venial vice—the drunkard has been a theme for laughter, but not an object of detestation. The consequence of drunkenness has only been, (as we now remember,) shown in its true light by one dramatist—and that the greatest—yet his lessons have not been strong enough for the subject. In the American play of 'The Italian Father,'* it is true we have moral lessons on sobriety and temperance, but the scenes of riot at which the thoughtless laugh, remain indelible,

* Written by Mr. Dunlap himself.

while the strains of wisdom, even from Shakspeare's mouth, are forgotten. How few remember

—— ‘He that doth the ravens feed,
Yea providently caters for the sparrow,
Be comfort to my age!’ ‘Let me be your servant,
Though I look old, yet I am strong and lusty:
For in my youth I never did apply
Hot and rebellious liquors in my blood;
Nor did with unbashful forehead woo
The means of weakness and debility;
Therefore my age is as a lusty winter,
Frosty, but kindly.’

Or,

‘What, are you hurt lieutenant?’

‘*Cassio*. Ay, past all surgery.’ ‘Reputation, reputation, reputation!’ ‘I have lost my reputation! I have lost the immortal part, Sir, of myself, and what remains is bestial. “Drunk? and speak parrot? and squabble? swagger? swear? and discourse fustian with one’s shadow? O thou invisible spirit of wine, if thou hast no name to be known by, let us call thee—devil!” ‘O that men should put an enemy in their mouths to steal away their brains! That we should with joy, revel, pleasure and applause, transform ourselves into beasts.’ ‘To be now a sensible man, by and by a fool, and presently a beast! O strange!—every inordinate cup is unblessed, and the ingredient is a devil.’

“What can be finer, what more true than this? but the million, we fear, are more apt to remember Iago’s words than Cassio’s. Locke tells us the story of two parrots—one had learned to bully and blaspheme, and the other to repeat the words of wisdom. They were placed together in the hope of reforming the noisy black-guard—but noise prevailed, and both became bullies. May not some dramatist show the misery resulting from the beastly vice of drunkenness, not only to the wretched individual himself, but to parents and relatives, to the wife and the child? Or would the fastidious turn from the scene? Or the jovial fellow hiss it? We believe if made the theme of true genius, the lesson would be received from the stage, and aid the efforts which the friends of humanity are making to banish from society the most debasing and irrational of all the many sources of human misery.”

If objection be made to the drama on account of its indirectly countenancing drunkenness, with how much greater force does the objection apply to the play-house itself; in which bars for the sale of liquors are established, and every facility furnished for exhibiting in the lobbies and anti-rooms the realities of carousing, noise and rude jest, to the destruction of character in the parties thus behaving themselves, and to the frequent disturbance of the more quiet and well disposed, who come with intent and desire to witness what is enacted on the stage alone. Americans after the example of their

English brethren, are apt to boast of their nicer moral sense, and stricter religious spirit than are displayed in these particulars by the people of continental Europe. In some respects there is just cause for this self-complacency—but in the matter now before us, we believe we may venture, with entire confidence in its correctness, to make the assertion, that in no theatre in any other civilized country, are the eye and ear so frequently offended, aye shocked, by persons and language, in the body of the house, as in England and America. Mr. Dunlap admits this fact, and despairs of the stage being what its friends and advocates would wish it to be, unless government or responsible and educated individuals take the guidance of it in their own hands, without a view of money-making—though he thinks that pecuniary gain would result to the parties concerned, under an improved order of things.

“The expenses of a theatre governed by the state, or by an enlightened and patriotic association, would be defrayed by the visitors—but profit should not be the object—loss should not be feared. Men of learning, and belles letters scholars should be the directors and writers, they should be made independent. Actors who are artists and scholars would be the performers—equally made independent. Every abuse would vanish. The theatre would be the temple of the muses, the graces and the virtues.”

Mr. Dunlap has put forward the two pictures of the theatre, as it is, and as it should be. The former is drawn from the life, the latter is fancy's sketch. It is not hard for the scrupulously moral and the religious to say, which shall be the means of directing their course. Even they, and we can, for ourselves, understand and respect their feelings, who admire the drama, must, we fear, resign to merited obloquy the play-house, so long as it is allowed to be a place in which the lowest passions of human nature find provocatives and means of gratification.

Each day reminds us of the frail tenure of life and the fallacy of expectations based on its continuance. On the very page in which we are called upon to notice the death of Doctor Spurzheim, we had fondly hoped to be able to announce to our readers and the public, the exact period of his visit to this city, and an outline of the subject of his lectures when here. Little did we, and his other numerous friends or the world at large, dream of his being cut off in the very beginning of his philosophical labours on this continent, which promised so much for the extension of his own fame, and,

what he prized still higher, an augmentation of the sum of human knowledge and human happiness. Mild and unassuming, he sought truth for truth's sake, and however eager in inquiry himself, and however intimately convinced of the correctness of his own inferences, he never attempted to exercise undue sway over others, or to extort acknowledgments in advance of conviction. Years have now elapsed since we first beheld Doctor Spurzheim, and listened to his lectures before a small company of English and Americans of both sexes at his own apartments in Paris. And yet the scene is as vividly present to our mind as if it had been but of yesterday. Well do we remember the prejudices with which we entered into the presence of the philosopher—we were hopeless of receiving useful and available instruction;—but matter for angry or ludicrous comment we did fully anticipate. The revulsion of our feelings was as sudden as it was unexpected. We were prepared for bold assertion, declamation, and all the stage trick of legerdemain, display of skulls and casts and busts—hurried speech, and eager gesticulation. Nothing of all this met the eye. No illusion was attempted or practised. There stood the lecturer, as one of the company invited to explain his views on a subject in which all either professed or felt an interest. He began without exordium or any attempt to propitiate favour or deprecate ridicule—he spake of man and his attributes—he passed in rapid but lucid review the opinions of the schools respecting his mental constitution; and noticed briefly but feelingly the unhappy application of these opinions to educating the young, and swaying the judgments of the old. Something else besides the understanding was, he told us, to be appealed to and instructed. Knowledge was not happiness—but rather the bitter-sweet of life, pleasant or painful according as it was accompanied by good and well trained feelings, and guiding, and guided by, morality. Wisdom and morals were not, he thought, so closely and indissolubly allied as men, relying solely on the strength of intellect and pride of science, were apt to imagine. Are the feelings different in different individuals—are they innate or acquired? He recommended us to observe the actions and gestures of children while yet in their nurses arms, of children of the same family, boys at the same school—to note also the differences in the dispositions and amusements of the two sexes from earliest infancy—and then we could answer for ourselves. Is the strength of intellect and capacity for acquiring knowledge proportionate to the energy of the feelings; and is there any assignable connexion or proportion between genius and goodness, or courage, or firmness,

or affectionate regard for parents, love of mankind, and devotion to country? If inquiry and observation satisfy us that there are these differences in the feelings of different individuals; and that the measure of intellect will not give that of the feelings, nor these latter furnish evidence of the extent of the former; it behoves us to admit that the mode of appeal, for instruction and moral discipline, must vary with the nature of the mind of the individual addressed. The intellect cannot be taught through the feelings—the feelings can be little swayed through the intellect. Do the modern plans of education meet this view of human nature? If they do not, is there not occasion for reform? Elucidating this part of the subject, the lecturer reminded us that personal happiness, often social usefulness—the discharge of our duty to man and our duty to God, were not the most conspicuous in the strongest and most cultivated intellects:—but that they were the reward of a happy endowment of good innate feelings, early and judiciously appealed to—that is, educated. Were these trivial matters—could we or any reasonable being turn a deaf or incredulous ear to a man who directed our attention to the most important points for temporal and eternal welfare? Determined not to misunderstand the lecturer—we took notes and studied afterwards, but still with some feeling of distrust and scepticism, the bearing of those views and the startling and interesting questions which had so won our attention during the moment of their delivery. A new field was opened to us—we were shown how to investigate human nature; to observe and note its innumerable varieties, to be aware of the necessity of the adaptation of scientific and moral instruction to the innate propensities, sentiments and intellectual powers of each individual. The cruel and unnatural system too often pursued by parents to their children, of either constantly deceiving them by flattery and falsehood, or of violently coercing them into one dull and heartless routine of imaginary duty, was now placed before us in startling relief. But of this more anon: our present remarks are on the man, rather than his doctrines.

Spurzheim in his simplicity of manner—his patience in observing mankind under every variety of aspect—his travels—and Socratic mode of teaching, resembled the philosophers of ancient Greece more than a modern professor. So bountifully endowed by nature, and his mind stored with the richest and most useful kinds of knowledge—that of man, in his structure, and functions, his innate powers, and capabilities of action, and the modifications produced by climate education and government, we are less surprised at the strong hold

which our lamented teacher took on the affections and esteem of the citizens of Boston during his short abode amongst them. Their attentive kindness to him on the bed of sickness from which he was destined never to rise, and the funeral honors paid to his remains are alike creditable to them and to phrenology. They have been sensibly felt by the friends of Spurzheim and of phrenological science throughout the United States, and constitute additional testimony to the large and liberal views of the New England metropolis.

Gaspard Spurzheim was born on the 31st December, 1776, at Longwich, a village near Treves on the Moselle. His parents cultivated a farm of the rich Abbey of *St. Maximin de Treves*, and he received his college education at the University of that city. He was destined by his parents to become a clergyman, but in 1799, when the French invaded that part of Germany, he went to Vienna to study medicine, where he became acquainted with Dr. Gall. He entered with great zeal into the study of the new doctrine of this original and celebrated man. Spurzheim was, as he tells us, "simply a hearer of Dr. Gall, till 1804, at which period he became associated with him in his labours, and his character of hearer ceased."

Having completed his medical studies, he and Dr. Gall quitted Vienna in 1805, to travel together and to pursue in common their researches into the anatomy and physiology of the whole nervous system. From 1804 to 1813, Drs. Gall and Spurzheim, were constantly together and their researches were conducted in common. They left Vienna on the 6th March 1805, to go direct to Berlin, and thereafter visited almost every city of any note in Germany, Holland and Switzerland—passing some time in each, in visiting the prisons, and institutions for education, and charity, and noting whatever was peculiar and remarkable in their inmates.—From Paris, in which our travellers finally settled themselves in 1808, Dr. Spurzheim, paid a visit to Vienna in June 1813, from which he proceeded to Britain and arrived there in March 1814. During his stay he published in English "The Physiognomical System of Drs. Gall and Spurzheim" in large 8vo; "An Outline of the System" in 12mo; and a work showing the application of phrenology to the subject of insanity. He also delivered lectures in London, Bath, Bristol, Dublin, Cork, Liverpool, Edinburgh. He returned to London in 1817, delivered again a course of lectures—became a licentiate of the Royal College of Physicians in that city, and in the month of July of the same year, returned to Paris. In this capital the attention of the learned and the wonder of anatomists had been excited by a memoir on the Anatomy of the Brain and Nervous System by Drs. Gall and Spurzheim, on which the Institute made a long, elaborate, and in many parts a favoura-

ble report. This memoir was the foundation of their large work on the anatomy of the brain, from which succeeding writers and teachers have largely borrowed without due acknowledgment, and often whilst detracting from the merit of the men whose discoveries they are at the very moment appropriating to themselves. Spurzheim, published in French, "*Phrænologie*" 8vo. with cuts; "*Essai Philosophique sur la Nature Morale et Intellectuelle de l' Homme*," 8vo. "*Encephalotomie*" on du Cerveau sous les Rapports Anatomiques 4to.—and also in French and English a work on the Elementary principles of education. He again visited England in 1826 and was received with marked distinction by the most celebrated professional and scientific men of the metropolis. All seemed eager to atone for the slights and obloquies to which he had been subjected by illiberal and contracted minds during his first visit. It was on that occasion that the passionate and flippant article in the Edinburgh Review was written by Doctor Gordon, a gentleman of talent, and zeal in the pursuit of knowledge, but too prejudiced to compare calmly the anatomical and physiological views of the two German philosophers, with the olden ones, which with some modifications of his own he advocated. In the interval between the publication of this article and the second visit of Dr. Spurzheim to Great Britain above mentioned, a great revolution of sentiment had taken place, and the revilers of the new doctrines finding themselves in the minority, and with few other weapons than the same old objections reiterated to weariness were constrained to be silent. In 1826 appeared his "*Anatomy of the Brain with a general view of the Nervous System*," 8vo. with plates.

On his return to Paris from his first visit to Great Britain, Spurzheim promised to himself "to spend the remainder of his life in that city, studying man in the states of health and disease." He deviated as we have already seen, from this intention by crossing the English Channel. Still more signally, and with the melancholy result which we all deplore, did he deviate from it by crossing the Atlantic with the intention of diffusing more widely than heretofore through this continent, a knowledge of his doctrines; or rather of the faculties of man, and that mode of cultivation, by which they could attain to the highest degree of intellectual and moral excellence, compatible with the frailty of their material instruments, and the purposes of their Maker.

In vino veritas, is a maxim which, like sundry sayings from a less poetical source need not implicitly be believed, nor acted on. The fate of Augustus the Second of Poland, shows, that the trial to bring the truth out, by pouring the wine in, is somewhat hazardous for him who shall attempt the experiment on another, since to lull suspicion he must needs be himself forward in emptying his glass. We learn another useful lesson from the incident to be now de-

tailed, viz: that the drinking of wine—aye, of *pure* wine, is not quite such a harmless thing as some would fain persuade themselves.

“Early in this year (1733) died Augustus the Second king of Poland, whose excesses had early ruined an iron constitution. At the time of his death, he was occupied in the vast and impracticable project of rendering the crown of Poland hereditary in his family. In furtherance of this purpose he had requested the king of Prussia, (Frederick William,) to send his minister Grumkow to confer with him at Warsaw, who accordingly met him there. ‘The king of Poland wanted to discover the designs of Grumkow, and the latter those of the king. They made one another drunk reciprocally in this intention, which caused the death of Augustus, and to Grumkow an illness from which he never entirely recovered.’”

Again, on the same authority we are told:

“The excesses of Frederic William in the use of wine, to which he was led, according to the testimony of the Princes of Bareith, by his minister Grumkow, and the imperial envoy at his court Seckendorff, in order that by these means they might obtain more complete possession of him, shortened his days. Though his constitution was an iron one, it yielded at last—he became dropsical and died at the age of fifty-one.”

In the *Third Anniversary Report of The Pennsylvania Temperance Society*, we find much instructive matter, and cause for abundant encouragement for the friends of temperance to persevere in their good work. We have not time now for analysing this Report, but must content ourselves with the following extract: It is from the report sent on to the parent society from the Allegheny County Temperance Society.

“That this society has exerted an influence, by no means inconsiderable, in checking the advance, and diminishing the evils of intemperance, will be clearly manifest, from the exhibition of naked and undeniable facts. Of these facts we would now present a brief summary.

“It is a fact, that three-fourths of the distilleries in operation among us, at the formation of this Society, have, from *principle*, or other reasons, ceased to manufacture ardent spirits. It is a fact, that the consumption of ardent spirits, (within our bounds) is now, not more than one-tenth of what it was before the existence of this Society. And that it has exerted a powerful and most salutary influence on the circumjacent population, is too plain to admit of a doubt. Some habitual drunkards have been reclaimed, and many, who, doubtless, were rapidly approaching the same character, have been mercifully restrained.

“The use of ardent spirits, heretofore so common at *house-raisings*,—*log-rollings*,—*corn-huskings*,—*vendues*,—*quilling-parties*,—

marriages,—births,—yes, and deaths and burials!! too, is now entirely done away by the members of this society, and through its influence, by many beyond its limits, who are not members.

“The practice of carrying the bottle into the harvest field, no longer exists. The largest crops of grain and grass have been cut and stored away in good season, without the aid of ardent spirits. Nor have we met with any difficulty, as was anticipated by some even of the warm friends of the temperance cause, in procuring hands to labour in harvest, in consequence of the exclusion of this liquid fire. But, on the contrary, we could name instances, more than one, in which intemperate men, waked up it would seem, in some measure, to a sense of their danger, by the blaze of light thrown around them, with the precise view to avoid the temptation, which they knew their thirst for ardent spirits could not resist, have preferred to labour for employers who withheld strong drink.”

One of the most interesting documents of the present season is the “First Annual Report of the Executive Board of the Union Benevolent Association”—in Philadelphia. We cannot convey a better idea of the spirit which actuates the praise-worthy efforts of the members of this Society, than by giving the following extract from the Report:

“The ultimate object of the Association, is, to elevate and better the condition of the poor by inculcating the principles of an efficient morality, and calling forth, or cherishing in their minds, a spirit of independence and self-estimation which will produce habits of thoughtfulness and reliance on their own resources.

“This transformation of character we propose to effect, by the simple agency of plain instruction, and cheering counsel, conveyed through the abodes of the destitute by the familiar visitation of those more elevated in life; who, rendering themselves acquainted with their habits of domestic economy, may at the same time that they point out the causes of existing depression, strive to teach the means whereby the greatest number of comforts may be obtained at the least possible cost.

“As auxiliaries in promoting so desirable an end, our design embraces the encouragement of new modes of industrious occupation, the collecting and communicating to the labourer a knowledge of situations where he may procure work, and the wages which his exertions will command; affording him, through the medium of tracts, facilities for obtaining information on practical subjects; instructing his wife in the most advantageous employment of her needle, the most frugal manner of providing for her family, and impressing upon her the value of thrift and economy in conducting all her household affairs. Urging upon those who may require it, the necessity of giving their children suitable education, and undertaking to place them in schools where they may obtain it; or, to find

situations for those who can be spared from home; and inducing all to lay by, as a resource for the future, such portion of their weekly or monthly income as they can spare, instead of spending it in dissipation or personal gratification."

The results, so far, of the labours of the Association, have been very satisfactory, and induce a hope of the entire fulfilment of the beneficent plans which they propose to themselves. More especially has the good work been forwarded by the zealous, untiring and judicious efforts of the female members, who are the chief executors of the measures agreed on in the Board.

Alum in the Tooth-ache.—In November, 1826, we published says the *Gazette of Health* the following formula for the most desperate cases of tooth-ache, unconnected with rheumatism:—

Take of Alum, powdered, 2 drachms.

Spirit of nitric ether, 7 drachms.

We are therefore surprised to find it mentioned in the periodical journals as a new remedy. In the *Gazette de France*, we find Dr. Kuhn is supposed to be the discoverer of this valuable mode of treatment.

"Dr. Kuhn asserts that alum, finely powdered, not only relieves the tooth-ache, but that it also arrests the progress of caries in the tooth. One or two grains are to be inserted into the cavity of the tooth, and this to be repeated when the pain returns: in a short time the pain will cease to recur, and the chemical action which constitutes the caries will cease."—*Gazette Med. de Paris*.

Madness & security from Cholera.—At a meeting of the Academy of Medicine in Paris, M. Esquirol communicated the singular fact that the cholera not only had not attacked any of the lunatic patients at Charenton, but that no case of the disease had occurred in any asylum, and that he had reason to believe that madness afforded a security against the attack.—Not such was the experience in Philadelphia during the prevalence of the cholera. The insane were not exempt.

SIZE OF ENGLISH HEADS.—The male head, at maturity averages from $6\frac{1}{2}$ to $7\frac{1}{8}$ inches in diameter; the medium or most ordinary size being *seven inches*. The female head is smaller, varying from $6\frac{3}{8}$ to 7 or $7\frac{1}{2}$ inches. Fixing the medium of the English head at 7 inches, there can be no difficulty in distinguishing the portions of society above from those below the measurement.

London. The majority of the higher classes are above the medium, while among the lower it is very rare to find a large head.

Spital-Fields weavers have extremely small heads, $6\frac{1}{2}$, $6\frac{3}{8}$, $6\frac{1}{4}$, being the prevailing admeasurement.

Coventry. Almost exclusively peopled by weavers, the same facts are peculiarly observable.

Hertfordshire, Essex, Suffolk, Norfolk. Contain a larger portion of small heads than any other part of the kingdom; Essex and Hertfordshire especially. Seven inches in diameter, is here as in Spital-Fields and Coventry, very unusual, $6\frac{1}{2}$ and $6\frac{1}{2}$ are more general; and $6\frac{3}{4}$, the usual size for a boy of six years of age, is frequently to be met with here in the full maturity of manhood.

Kent, Surrey, Sussex. An increase of the usual average size of heads, is observed, and the inland counties in general, are nearly upon the same scale.

Devonshire and Cornwall. The heads of full size.

Herefordshire. Superior to the London average.

Lancashire, Yorkshire, Cumberland and Northumberland—have more large heads, in proportion, than any part of the country.

Scotland. The full sized head is known to be possessed by the inhabitants. Their admeasurement ranging between $7\frac{3}{4}$ and $7\frac{7}{8}$ even to 8 inches—this extreme size however is rare.

ACTORS, we mean good actors and respectable men, are a long-lived race. A friend has remarked that he can recollect thirty actors, generally of high eminence, who died within the space of 40 years, at or beyond the age of 70, and adds, "it would be difficult to show as large a number out of the same proportion of merchants and traders." Macklin died at more than 100 years of age: we saw him act, with power and spirit, his Shylock and Sir Pertinax, at the age of 94; Mrs. Bracegirdle died at 85; Mrs. Yates 97; Mr. Blisset, the elder 84; Colley Cibber 86, and a very long list of names might be added of those who lived beyond the "threescore years and ten" allotted to men in general who live to old age. There are now, or lately were living, in competency or affluence, many more who could be mentioned as proofs of longevity among actors. The improvidence of actors is another vulgar error. When we speak of actors we do not mean message-carriers, or the candle-snuffers, and dram-drinkers of the stage. Of the hundreds who have retired from the stage in affluence, or with competency, or now live and act with the same advantage we will only mention the names of Quin, Yates, Garrick, Smith, Cibber, Farren, Siddons, Mathews, Darley, Jefferson, Wood, Hull, Mattocks, Melmoth, Barry, Clive, Pritchard, Johnson, O'Neil, Bartley, Pope, Quick, Dodd, Bannister, (why omit the name of John Kemble). We could fill our pages with names who are honored for their talents, and enjoy in private life the more estimable reward of esteem for their virtues. It is the lot of the stage's historian to record vice and folly, and that record is remembered longer than the page which speaks of virtue—so the pages of the historian are filled with war and crime, and the years of peace passed over. Men's good deeds are written in sand—their evil ones on brass.—*Dunlap's History of the American Theatre.*

Novel Remedy for a Stoop.—A Surgeon, says Mr. Brande in his Journal, was consulted by a gentleman, who is now one of our first tragedians, as to the best mode of correcting a stoop which he had acquired. The surgeon told him that neither stays nor straps would do him any essential good, and that the only method of succeeding was to recollect to keep his shoulders braced back by a

voluntary effort. But the tragedian replied, that this he could not do, as his mind was otherwise occupied. The Surgeon then told him that he could give him no further assistance. Shortly after this conversation, the actor ordered his tailor to make a coat for him of the finest kerseymere, so as to fit him very tightly, when his shoulders were thrown back. Whenever his shoulders fell forwards, therefore, he was reminded by a pinch under the arms, that his coat cost him six Guineas, and that it was made of very fragile materials. Being thus forced for the sake of his fine coat, to keep his shoulder back, he was soon cured of the stoop. The Surgeon was much obliged to him for the hint, and afterward, when consulted whether young ladies should wear shoulder straps, permitted them, on condition that they should be made of fine muslin, or valuable silk, for tearing which there should be a forfeit.

A Set Form of Puffing.—The following will be found as useful to all vendors of specifics, as the complete letter writer is to those unskilled in epistolary composition. Quacks are seldom troubled with even the common elements of learning, nor do they care to follow the dictates of common sense: so that in every respect the advertisement of the *Ægis of Life*, will answer for them, merely substituting for it—the words "*Panacea*," "*Catholicon*," "*Patronus Magnus*," "*Pulmel*," according to the interest which the advertiser has in one or other of these mixtures: Publishers of periodicals and of new books may also be benefitted by this formula.

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The Ægis of Life! Under the distinguished patronage of the illustrious Ram-mohun Roy, the Great Bengal Lion.

"Quo fugit Vulpes? Heu! quove color rubens?"

(FREELY TRANSLATED.)

"Which way did the Fox go? Oh, dear! where are all the red jackets?"

In Cases of Gout, Rheumatism, Lumbago, Scalds, Burns, Asthmas, Chronic Coughs, Pains in the Head, Heart-burn, Tooth-ache, Sore Throats, Corns, Indigestions, Chilblains, Chapped Hands, Lowness of Spirits, Weak Eyes, Giddiness in the Head, Loss of Appetite, &c. &c. &c., the NEW SPORTING MAGAZINE, combining all the salutiferous properties of Daffy's Elixir, Solomon's Balm of Gilead, Perry's Essence, Hichman's Pills, Dredge's Heal All, Lignum's Antiscorbutic Drops, Dr. Wright's Pearl Ointment, Marshall's Universal Cerate, Congreve's Balsamic Elixir, Moxon's Effervescent Magne-sian Aperient, Mallan's Celebrated Mineral Succedaneum, The Improved Portable Hot Air and Vapour Baths, Rowland's Kalydor, and Warren's Blacking, has been found of incredible efficacy, and is strongly recommended to a liberal and discerning Public, as the most valuable Compound this or any other age has ever produced.

The following Testimonies of the sovereign efficacy of this EXTRAORDINARY WORK may suffice to shew its general influence.

"To the Editor of the New Sporting Magazine.

"SIR,

"I feel it to be a duty I owe to you, to myself, and the Public, to state that I have experienced the most beneficial results from taking in your invaluable Magazine. A martyr to that terrible malady, Ennui, (vulgarly called, the Blue Devils,) I was recommended to try the effect of your incomparable mis-cellany; and, after a few numbers, found myself so rapidly convalescing that I could sleep soundly all night, and keep wide awake all day. I need scarcely tell you that I have taken it regularly ever since; and my friends, next to the admiration they entertain for your manly and national periodical, have no

greater matter of astonishment than the surprizing improvement in health and spirits of,

"Sir, Your grateful and obedient Servant,
"JOHN BULL, Bart."

Another.

"Sir—My life is yours, for you have saved it. By this time I should certainly have kicked the bucket if it hadn't been for your uncommon good Magazine. I was uncommon bad, till somebody recommended the *New Sporter*, and I ordered it: but, by an uncommon unlucky accident, they sent me the wrong. They sent me the *Old Magazine* instead of the *New*, and uncommon bad it made me, creating nausea at the stomach, drowsiness in the head, and an uncommon queer sensation all over me. As soon as I got the proper book, however, all these symptoms vanished, and were succeeded by others of an uncommon opposite nature; so much so that I beg you will send me immediately all the back numbers, if it is possible to obtain them, and accept the best thanks of,

"Witness,

"RICHARD ROE.

"Sir,
"Yours, till death,

"JOHN DOE.

"P. S. If you like to use my name in puffing off your book, I beg leave to say you are uncommon welcome."

Another.

"Sir—My husband was for many months inflicted with a badliness wick quite puzzled the doctors, and made me very Unappy but luckily taking up a number of your Wonderfull magazine he felt so much Beter that he has took it in ever since and continues to improve rapaciously Sir I myself had a complaint in my inside as cost me 17 pound odd last summer but having followed my Dear husbands example in being your constant reader I am quite another woman though still

"Your Dutiful servant to command
"MARY HODGKINS.

"P. S. My Dear husband is no scholar leaving all that sort of Thing to me But he can't be easy without having a hand in this letter as follows:

"BENJAMIN HODGKINS,
"His + mark."

The **NEW SPORTING MAGAZINE** is sold by Messrs. BALDWIN & CRADOCK, Paternoster Row, London; and by all Booksellers and Medicine Venders in the United Kingdom; in Numbers, price 2s. 6d. each, or the volume, containing six numbers, neatly bound and lettered, at 15s.

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N. B. Warranted to retain its virtues for any length of time, and in any climate.

☞ Ask particularly for the *New Sporting*.

Good News.—It is stated that seventy-five ships cleared the last year from New Bedford, without ardent spirits, except for medicinal purposes, and one of them without even that supply.

One of the New York and Liverpool Packets sail henceforth as a Temperance ship. The price of the passage is \$100, in place of \$140, when distilled liquors, wine, and jollification were to be paid for.

Doughty's *Cabinet of Natural History and American Field Sports*. The eighth number of the second volume of this instructive and ornamental work has just been published. The picture of the *Flicker* or *Golden-Winged Woodpecker* is worth more than the price of a number.

THE JOURNAL OF HEALTH AND RECREATION—is published monthly at the rate of \$1 25 per annum. Each number to consist of 32 pages 8vo. The work will contain numerous engravings in illustration of the subject matter. Address S. C. ATKINSON, No. 12 Hudson's Alley, Philada.

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JOURNAL OF HEALTH,
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RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, JANUARY, 1833.

[No. 5.]

Benjamin Rush, M. D. was born on the 24th December 1745, old style, near Philadelphia; and died April 19th 1813, in the sixty-eighth year of his age. In the history of the earthly career of a large majority of mankind, the dates of their birth and death are the only epochs which require to be recorded. Far different is the case with the subject of this notice. As one of that immortal band, who signed the ever memorable Declaration of Independence; as the successful medical practitioner and teacher, who won for the profession, of which he was emphatically the leader and regenerator, freedom from the thralldom of metaphysical obscurity and nosological jargon; as the friend of the whole human race in advocating the abolition of African slavery; as one who loved to temper justice with mercy by recommending the doing away with capital punishment, and who eagerly sought to dry up the most prolific source of crime and disease by exhortations to abstinence from intoxicating liquors, Benjamin Rush shines conspicuous for his devoted patriotism, his eminent moral and medical philosophy, and zealous and ardent philanthropy. On the citizens of these United States, on Christians of every nation, and on the suffering and enslaved in all parts of the world, he has irresistible claims to enduring honour and esteem.

In the narrow limits to which we are restricted in this place, we cannot enter into a detailed history of this eminent man. A specification of the leading events in his life will be sufficient to justify the eulogium already pronounced. Benjamin Rush was of respectable but by no means wealthy or influential parentage. In looking back on the biographies of the most distinguished men in all ages, we can hardly resist the conclusion, that, in the present constitution of human nature, its energies are only called into vigorous and efficient action by interposing difficulties and impediments. In other words, to woo fortune with success, and to reach the goal of hon-

ourable ambition, a man must in the first place be destitute of what are so commonly but erroneously considered adventitious aids—birth and wealth. Young Rush was sent to Princeton College, where, with the eagerness unfortunately so general among the youth of America, to attain to collegiate honours, ere age has matured judgment, and enabled them to thoroughly grapple with the difficulties in science and the arts, he graduated in 1760, before the completion of his fifteenth year. This precipitancy in his preliminary studies was, however, compensated for by the length of the period during which he served his noviciate in medicine. Six years were spent for this purpose in Philadelphia; and nearly three more in Europe. He took the degree of Doctor of Medicine at Edinburgh in 1768; and after spending a winter in London and the following spring in France, he returned to Philadelphia. Here he commenced the practice of his profession; and here, as practitioner and teacher of physic, he laid the foundation of his fame, broad and deep. His first appointment was to the professorship of chemistry, in the college of Philadelphia in 1769. But the approaching crisis, which was to sever for ever the colonies from the mother country, and to convert dependent provinces into independent and united states, for a time interrupted the course of medical, in common with all literary and scientific tuition. In many instances the *toga*, the gown, was exchanged for the sword: rights, at first a theme for animated and angry discussion, were afterwards made the subject of fierce and bloody strife. Every man was required to act his part, for his own and his country's welfare; and nobly did members of the medical profession redeem the pledges with which they joined their fellow citizens, in the most momentous contest in which men had ever before engaged. Rush was one of the signers of the Declaration of Independence, to which we find also attached the names of a Thornton, a Hall, a Wolcott and Bartlet, thus furnishing additional testimonies of the liberalizing and elevating influence of medicine. Nor can we forbear, having introduced these, to advert to the devoted offering in the same cause of the heroic Warren, who poured out his heart's blood on Bunker Hill, and gave a sign, the memory of which can never be effaced.

Not content with signing the Declaration of Independence and quietly awaiting the result, Dr. Rush availed of the opportunity presented by the war, for extending his sphere of medical experience, and at the same time of serving his country; and was made physician general of the middle department. This appointment so honourable to himself, and advantageous as it afterwards proved to the profession, by the ample materials which it furnished him for his work on hospital and army diseases, and the effects of revolution on the army and the people, was productive of no small share of mortification and annoyance, by what he conceived to be the mismanagement of some of his associates in the medical staff. Whatever dissatisfaction he may have experienced and expressed at the conduct of the Commander in Chief, had we believe,

its origin in the undue influence which Dr. Rush thought these persons exercised in swaying the judgment of that distinguished man, on the subject of the medical staff. Coolness thus begun, may, we can imagine, have been increased by subsequent events, without either party having a direct participation in them, certainly no purposed intention, to the prejudice thereby of the other. The opposition evinced on one occasion at least, by Dr. Rush to General Washington, has been made a pretext with some, and a conscientious motive with others, for disparaging the patriotism and disinterestedness of the former. But we ought to judge men engaged in a common cause, by their sincerity and devotedness in this cause, and not by the estimation in which they may respectively hold each other. Numerous sources of misconception of motive and discontent at means employed may exist among co-patriots, without any real foundation for our impugning the character of any one of them for purity of feeling, and sound judgment. Having ventured these remarks of a general nature, we must be allowed to add, that there is enough in Rush's recorded opinions of the Father of his country, to show that he had no settled purpose of detracting from the merits, or withholding his share of approbation of the incorruptible integrity and lofty patriotism of the latter. If we are not misinformed, there is still stronger evidence of this fact than has yet met the public eye.

Consistent in his desire to see rational liberty firmly established, Dr. Rush, as a member of the Pennsylvania Convention for the adoption of the Federal Constitution, used his best endeavours in favour of this great instrument, and continued to give it his warmest support.

But a period was now approaching fraught with terrors and death, and which tried men's courage, at least tested their fortitude more than revolution and war. We allude to the dire pestilences in Philadelphia of the years 1793 and '98. It would be foreign from our present purpose, to give even a sketch of the differences of opinion among medical men respecting the origin, nature and treatment of the yellow fever in the above mentioned years. We believe, however, that we shall not be doing injustice to others, if we claim for Dr. Rush, the credit of entertaining sounder and more rational views of the disease, and pointing the way to a more successful treatment than had been adopted by his predecessors, and by most of his immediate contemporaries. In common with all of his fellow citizens, he believed at first in the foreign origin and contagiousness of the yellow fever: but extensive personal observation satisfied him of the erroneousness of this opinion; and with a manly and philosophic frankness, which small minds are incapable of, he freely avowed the change, and assigned the reasons for it. His practice of free bleeding and the administration of cathartics in the fever was strongly contrasted with the almost general use, at least in 1793, of stimulants such as bark, wine, camphor, &c.—Time and successive trials here and elsewhere have shown the impropriety and want of success of this latter course. The same

irresistible monitors have spoken clearly in favour of bloodletting in the early stages of the disease, as a remedy of paramount and indispensable necessity. In combating the fever of 1798, Dr. Rush found himself less alone—his belief of the non-contagiousness of the disease was strengthened by the experimental observations of Physic, Cathrall and others, to the former of whom we are more especially indebted for our knowledge of its being mainly and primarily a disease of the stomach.

In these seasons of continued toil and devotion night and day to the sick, who in immense numbers invoked the aid of his professional skill, Dr. Rush must, one would naturally suppose, have been acquiring wealth; at the same time that his acumen and new and important views of the disease, must with equal plausibility, have enhanced his reputation with his medical brethren and the community at large. Facts do not warrant our indulging in this belief, however natural and creditable to human nature. He was arrayed against too many deep rooted prejudices, in his denying the foreign origin, and insisting on the domestic sources of yellow fever; and in his recommending and carrying into effect a mode of practice at variance with the pedantry and inherited creed of the schools, for him to be able at once to reap the rewards of his genius and his services. Seasons of pestilence are not at any rate harvests for physicians, as is generally believed. A great proportion of the sufferers at these times is of the poorer and often destitute classes, whose claims for medical attendance are as urgently pressed, and must in duty be as promptly and regularly attended to, as those of the wealthy and better circumstanced in the world. Of the exposures encountered by physicians, and of their sickness and death, during the prevalence of epidemic diseases, by far the greater number will be found to have been from attendance at unseasonable hours on the poor, and in the impure air of their often miserable tenements. We do not mention this fact as a matter of professional boasting, nor do we think that the conduct of physicians could or ought in this respect be other than it is. But we do protest against the sacrifices of time, comfort and health, which physicians make in the service of the poor—sacrifices greater than any other class of men, being made an argument by the penurious wealthy man, or those in ample circumstances, for curtailing them of their fair dues on occasions where no pecuniary disability exists. The rich pay or should be made to pay for the poor, is a common saying, if not a well accredited opinion. It is not correct; nor is it acted on by physicians. They would merely object to the idea of rich persons being charged less than the regular fee, because the poor do not pay any.

On the union of the College of Philadelphia with the University of Pennsylvania, in 1791, Dr. Rush received the appointment of Professor of the Institutes and practice of medicine and of clinical practice. The prodigious popularity of his lectures in this new chair, and the unprecedented increase of the medical class in the University, owing in no small degree to this popularity, are matters

familiar to every medical reader. Such copiousness of materials, the result of personal observation and diligent reading, not merely of medical works, but of all the records of the times; such felicity of arrangement and so copious and fervent a style, gave a power and character to the lectures of Dr. Rush, which few men have ever been able so successfully to impart to their intellectual labours in any department of literature or science, and which continued uninterrupted to the time of his death. This Journal is not a suitable medium for a critical analysis of the peculiar merits of the medical doctrines of this great teacher. His first essays and lessons, some of which were immediately addressed to the general public in a popular hygienic form were, as we learn, the direct offspring of the system of Brown. But though dazzled by the simplicity and plausibility of the views of the Scotch reformer, in common with most of the medical men of his time, who had not arrived at that age when change of opinion is difficult if not impossible; Rush soon discovered that however correct in the basis, a very different superstructure must be raised from what had been attempted by Brown himself. The latter taught that diseases were either the result of too high or too low action, of excessive or deficient excitement; and that, in by far the greater number, they were of the last class, that is of debility. Dr. Rush adopted the general division—but showed most conclusively that the proportion ought to be reversed, and that an immense majority of the diseases to which the human frame is liable, are the product of morbidly increased excitement. In this sense he was accustomed to speak of disease as a unit—the modifications and distinctive characters depending on the organ or order of parts chiefly affected. Thus whether we have to do with fever, or pleurisy, or rheumatism, or dropsy—we encounter morbid excitement, which it becomes us to remove by means often identical or nearly analogous. In doing this, we often cure the disease—or failing to do so, we prepare the system for those remedies which are thought to have a peculiar action on one organ or order of parts. Blood-letting and low diet, are, for example, often sufficient to reduce the morbid excitement in the above mentioned and in many other diseases, and by so doing to remove them. Other means being necessary, we may then administer purgatives, expectorants or diaphoretics, according to the particular indications, but never losing sight of the state of the general system—never being misled by the notion of the entity or specific character of a disease, and never relying on so called specifics for its cure. It is the state of the system at the time, not the name of the disease, for which a physician out to prescribe. In these respects the simplicity and lucidness of views and practice taught by Dr. Rush, were strongly contrasted with the complex and unnatural notions in many medical writings, and inculcated in most medical schools. American medicine under his auspices and example, occupied the vantage ground of European medicine, and many salutary reforms of practice and successful modes of combating disease, at present introduced into the latter as novelties and discoveries, had been by the

instrumentality of Rush ingrafted on the former, a quarter of a century before.

In his "Medical Inquiries and Observations," Dr. Rush has published most of his views of disease, and of the general outline of treatment for their cure. His essay on Blood-letting—his notions of the nature and cure of dropsy, and nervous diseases so called—and above all, his work on the Diseases of the Mind, are invaluable, for the facts and reasoning by which he confirms and illustrates some of the most important parts of the practice of medicine, and the means of obtaining a healthy body with a healthy mind.

Dr. Rush was among the foremost, if not the very first, to recommend labour and solitary confinement in place of capital punishment; and he ought to be regarded as one of the earliest reformers of that harsh and cruel system of criminal jurisprudence, which has so long found favour in the country of our ancestors.

He was not less conspicuous for his zeal in the cause of the poor African—His efforts in favour of the abolition of slavery, in conjunction with those of other distinguished philanthropists, are now in a process of happy consummation, without injury to any reasonable interest or conflicting with any allowable prejudice, by the system of colonization at Liberia.

Early aware of the pernicious effects of the use of ardent spirits, Dr. Rush was not backward in pointing them out to his fellow citizens, in a small tract for popular use, in the year 1791. In his medical lectures and writings, he also laid great and merited stress on the immense mischief done by the common practice of physicians prescribing spirituous tinctures and infusions for so large a tribe of diseases. He showed that these things were often decidedly injurious at the time, and still worse—laid the foundation for a love of spirituous drinks, which degenerated into confirmed habits of drunkenness. The enormity of the practice of physicians prescribing, and of the people so generally using ardent spirits, was first pointed out by Dr. Rush, in language so clear and with arguments so forcible, as to leave little to be added except in the accumulated testimony of the same nature which every year brings, by those who have come after him.

Akin to indulgence in the use of ardent spirits, is the filthy and unhealthy practice of using tobacco—against which Dr. Rush raised his voice and exerted his pen with his usual ability.

In nearly all these great questions of moral reform, he was far in advance of the majority of his fellow citizens. Mere worldly policy would have prevented him, as it has so many others, even at the present day, from an open manly avowal of his sentiments; but with him, self-conviction was soon followed by publicity, and untiring efforts to make others participate in the benefits growing out of his benevolence and philanthropy. Time, which will hurry into oblivion some of his speculations in medicine, will only serve to render brighter, and place in more eminent relief, his virtues as a patriot and philosopher, intent on ameliorating in every practicable shape the condition of his fellow creatures. Who could desire a greater eulogy! Who aspire to a nobler fame!

FOOD OF SEAMEN.—PRESERVATION OF FOOD.

The question relative to the best and most convenient aliment for the nourishment of the crews of vessels, is one evidently of very great importance to every commercial community. It has consequently received from many of the maritime powers of Europe a very great deal of attention. From none more so than from that of France; to the experiments performed at its suggestion, on the most extensive scale, and under the superintendence of men adapted, as well from their scientific acquirements, as by their habits of close observation, to obtain from them correct results, we are indebted for many valuable facts on the subject of aliment generally.

The latest publication in connection with this question, is that of M. Keraudren.* The following extracts from this memoir, will, we are persuaded, be, in many points of view, interesting to most of our readers.

To enable an individual, remarks the author, continually to undergo toilsome labour, and confront new dangers, courage is not alone sufficient—his body must likewise be healthy and robust.—When man becomes feeble in body, he loses his energy and his boldness. Sufficient and proper food is especially necessary to the maintenance and development of his physical strength. The mariner, especially, therefore, requires a proper nourishment; for we all know what are his fatigues, and by how many perils he is constantly surrounded. When we consider that at sea, his diet is composed principally of salted meat and leguminous seeds in a dry state, we perceive how important it is that these substances should, at least, be of a good quality. To secure this has long been an object of solicitude. In 1771, M. Poissonnier Desperrieres, adjunct inspector of marine hospitals, proposed to restrict the diet at sea principally to vegetable substances. This gentleman attributing the origin of putrid diseases to the use of animal food, and considering scurvy a necessary consequence of living on salted meats, believed that by a diet chiefly vegetable these diseases would be prevented or rendered less malignant. His object would have been better attained had he in place of dried leguminous seeds, been enabled to furnish the marine daily with fresh vegetables during their residence at sea. The effect of the diet proposed by M. Desperrieres upon the health of the national seamen was ascertained by experiment. The frigate *Belle Poule*, was provisioned accordingly, and after a five month's voyage returned to Brest, without her crew having experienced any disease, but with bodies exhibiting the most evident marks of emaciation and debility. Thus confirming a truth long known, that animal food is in general, necessary to the due maintenance of bodily vigour in man.

Some years subsequently this subject was submitted to the examination of the Royal Society of medicine; and we find in the

* De la nourriture des équipages et de l'amélioration des salaisons dans la marine Française, Par M. Keraudren. Paris 1829.

Volume of its Transactions for the years 1784—'85, a report in reply to the questions proposed by Marshal de Castries, minister of marine, relative to the nourishment of the crews of vessels. The authors of the report compared the mode of victualing the English and Dutch vessels of war. The English furnished theirs almost exclusively with salted meat, while the ordinary nourishment on board those of the Dutch, was found to be dry vegetable substances.—It is added that the crews of the English were most subject to scurvy, and that the disease caused among them greater ravages than among those of the former. They conclude that the substances which constitute the most healthy part of the nourishment employed by man, are the farinaceous, and hence it is the dry legumina that should form the principal part of the diet of seamen. In general, they conceive that flesh is only a useful addition to this diet, as it aids the digestion and animalization of vegetable food. It is very probable that scurvy was found to be more frequent and severe on board the English than on board the Dutch ships; but it is not so certain that the difference in their diet was the cause of this. We have repeatedly seen the crews of vessels enter into port after long voyages, during which they have not been affected with scurvy, notwithstanding they had habitually eaten salted provision. But if the gentlemen who drew up the report referred to, had attributed the production of scurvy to salted meat badly preserved, or of an unwholesome quality, then should we have coincided in opinion with them. The dry leguminous seeds by which they propose to replace the salted food of seamen, are themselves objectionable. They are viscous and of difficult digestion; this is especially true of the dry beans so largely used at sea: while their hard skin defends them from the attack of insects, it prevents likewise the action upon them of the stomach. They possess no anti-scurbotic property. In preventing this disease they act negatively by taking the place of salted meats of a bad quality. Besides, when we consider the small quantity of nourishment contained in vegetable substances convenient for the victualing of ships; especially in their dry state, when a great part of their mucilage is lost, and by undergoing a species of fermentation, their fecula, which is the part upon which their nourishment depends, is altered or destroyed, we shall see how little preference is to be accorded them over salted meats of a good quality, for the aliment of men subjected to the toils of a marine life. The observations of the officers and physicians of the navy were nevertheless the cause of some useful changes in the diet of the seamen. The heads and feet of the animals were rejected, as susceptible, when salted, of a rapid decomposition. Fish was likewise left out from the food of seamen, from its unwholesome properties and the disagreeable and injurious odour which it exhales in the vessels; and finally, the proportion of salted beef was diminished, and that of pork, the superiority of which had been tested, was increased. The manner of preparing these salted meats underwent, however, no change; a circumstance nevertheless exerting no little influence upon the vigour and health of those who partake of them.

"I had," remarks our author, "frequently observed, that beef when dried and hardened by salt, was deprived entirely of its nutritive properties. The flesh of pork, less solid, was therefore generally preferred. I, accordingly, with the consent of all, found fault with the bad choice made of the cattle slaughtered for the use of our ships." On examining into the manner of salting the meat, he discovered that a large amount of common salt was used but no salt petre, and a pretended anti-scurbotic mixture was added to each barrel of meat composed of alum, gum-dragacanth, and madder, which latter accelerated an unwholesome change in the meat, and gave it a filthy and disgusting appearance. In consequence M. Keraudren obtained an official order directing the use of less salt, the addition of nitre, which besides preserving the meat gives it a pleasing vermilion tint, and the disuse of the anti-scurbotic mixture, in the preparation of the meat for the supply of the French navy.

The use, he remarks, of meat properly salted is not so unwholesome as has been supposed—it is not alone the cause of scurvy. Nevertheless, the means of preserving meat without the use of salt will be an important discovery. To this end the Society of Encouragement have proposed a prize; for which several essays have been offered. Appert suggested to partially cook the food whether vegetable or animal, and to put it afterwards in vases perfectly closed, and to be then immersed in water the heat of which is to be raised to the boiling point. In these vases, however, the substances were found to undergo more or less change; and the plan is altogether incapable of being applied to the victualling of a ship or squadron. It affords, notwithstanding, an admirable means of preserving food for the sick, and in the French navy has been adopted for that purpose. Meat suspended in a current of air, dries without putrifying—but in European climates, when conducted as it must be in chambers or magazines, it acquires always a disagreeable flavour. When meat is exposed to a free current of air, the watery juices, which in its recent state cause its suppleness and increase its nutritive properties, evaporate, and it becomes dry and solid. When dried by heat it is the same. Meat thus prepared will not undergo putrefaction so long as it is kept from moisture. In drying, however, the meat, particularly beef, loses in great part its osmazome or that balsamic property to which it owes its taste, and which renders it so much the more digestible and nutritive. Meat when dried to a certain extent, is likewise rendered more liable to imbibe the moisture of the atmosphere, and in this manner to become again susceptible of decomposition. If desiccation has been carried too far the animal fibre will not any longer admit the water, and will retain its hardness after boiling, so that it is impossible to cook it. The point to which the drying of the meat should be carried, therefore, is that which will be sufficient to prevent its undergoing any decomposition, while such a degree of hardening is avoided by which all its alimentary properties are destroyed. The hydrochlorate of soda (common salt) is perhaps the best agent by which to produce in meat the proper de-

gree of dryness; that salt absorbing the fluids as they escape from the meat, while at the same time, its anti-septic properties are indisputable. The heat of a stove, the action of drying substances, of oil, of vinegar, and of spices are so many means for preserving meat, which can be employed only on small masses, and are not adapted to the preservation of large quantities. It is said that the Indians have recourse simply to the use of sugar for the preservation of animal substances, but in imitating their example the English have employed the sugar only in connection with common salt and salt petre. It is then, after all, by salting alone, that we have it in our power to preserve for any length of time animal food, in a condition which renders it fit for the nourishment of man; and in quantities adapted to the victualing of an extensive population, of an army or a fleet.

In renouncing all other means of preserving animal food, however, it is not impossible to correct the acrid nature, and to augment the wholesome properties of salted provisions. By its admixture with vegetable substances, salted flesh becomes more fresh and less stimulating; and the dried vegetables being penetrated by the juice of the meat, become more succulent and nutritious.

In February, 1823, M. Keraudren made a report to a commission of which admiral Jacob was president, on this subject, in consequence of which, not only was the union of the dry leguminous vegetables with salted meat in the same ration directed to be observed in the navy, but every morning the men are furnished with a warm breakfast, adapted to the particular climate under which they are at the time. An arrangement the effects of which have proved of the most pleasing character.

GENTOO LAWS IN RELATION TO WOMEN.

We have been much amused by a perusal of Halhed's very interesting view of the Gentoo Code; more especially, those portions of it which are devoted to the laws relating to the female sex. The mixture of absurdity and of good sense by which many of them are characterised, renders it often difficult to decide whether they are most deserving of censurè or of praise; while others present so degrading an opinion of the female character, and are calculated to reduce so low the dignity of the sex, that we could scarcely believe that even among savages, they would be for a moment tolerated.

The following six things are enumerated in these laws as disgraceful to a woman.

1. To drink wine and to eat conserves, or any other inebriating drinks or viands.
2. To keep company with a man of bad principles.
3. To remain separated from her husband, when he is not gone upon a journey.
4. To go to a stranger's house without good cause.
5. To sleep in the day time.
6. To remain in any other house than that of her husband.

The qualities of a good wife are thus summed up.

A woman who always acts according to her husband's pleasure, and speaks no evil of any person, and who can herself do all such things as are proper for a female, and who is of good principles, and who is the mother of a son, and who rises in the morning before her husband; such a woman is found only after many religious works and by a peculiar happy destiny; such a woman, if any man forsake of his own accord, the magistrate shall inflict upon that man the punishment of a thief.

We rather think that among the spirited females of our own land, such a law as the following would have a tendency to augment very considerably the sisterhood of old maids.

A man, both day and night, must keep his wife so completely in subjection, that she by no means be mistress of her own actions. If a wife have her own free will, notwithstanding she be sprung from a superior caste, yet will she behave amiss.

The following law would appear to us to be calculated rather to form rebellious wives, than to reclaim them.

If a man by confinement and threats, cannot guard or control his wife, he shall give her a *large sum of money*, and make her mistress of her income and expenses, and appoint her to dress victuals for the *Dewtah*,—that is the Deity.

Another law provides that, a woman who always abuses her husband, shall be treated with good advice, for the space of one year; if she amend not with one year's advice, the husband shall no longer live with her, but shall provide her with food and clothing.

This is an admirable provision to enable a wife to get rid of a disagreeable or surly husband.

A woman who follows her own inclinations, goes whithersoever she chooses, and does not regard the words of her master, such a woman is to be turned out of doors. These offences would seem to be viewed as of a more heinous character than abusing the husband, for no provision is made to supply her with food or clothes.

A Hindoo wife must never go out of the house without her master's, that is her husband's consent; she must never hold discourse with a strange man; excepting he be of the religious, a hermit, or aged; she must never laugh without drawing a veil before her face; she must not eat until she has served her husband and his guests with victuals; but she may take physic before they eat; she must never stand in the door; nor look out of a window.

The foregoing, we give as a specimen of the ridiculous and degrading provisions of these laws: but what follows will be allowed by even American wives to be a wise enactment.

After directing that the husband when going on a journey shall leave sufficient provision for his wife's support, the law goes on to say that, provided, however, a woman, whose husband is absent, shall expend, in the support of herself and family, all the money he left with her; or if, the husband shall go on a journey without leaving any thing with her to supply her expenses, she shall support herself by her own industry, in painting, spinning, or some other such employment.

A DIALOGUE ON DOCTORS.

Where the following dialogue occurred is of very little importance—let it be in some foreign city, visited by us in the course of our travels. That something like it has often taken place in our own city is we believe undeniable. There is perhaps no class of professional men more freely talked of every where; or whose characters and reputation are more completely at the mercy of a certain set of ignorant gossips, than physicians. Even the most skilful are not placed beyond the influence of those libels, so commonly uttered among the visitors of a sick room. Some trifling prejudice, friendship for some rival candidate for professional fame, the mistakes of patients, or even want of acquaintance with his name and acquirements, are often sufficient to cause a medical man to be denounced as unworthy of confidence by the ignorant and unreflecting. While the best earned reputation of the oldest practitioner is not proof against these attacks, they who have but recently entered upon their professional career, are, however, the most obnoxious to them. They constitute in fact, one of the greatest difficulties the young physician has at first to contend with; even many years pass before he can reconcile the attacks to which his reputation is subject, with the character of the people from whom he has anticipated encouragement, and his own consciousness of having prepared himself with industrious zeal for performing creditably the duties of his profession. But to the dialogue—

Let us suppose a nursery; a mother hanging with anxious looks over the couch of an infant, whose flushed cheek, restlessness, and frequent moans indicate that it is the subject of disease. Around the room are seated several neighbours, who have assembled for the charitable purpose of consoling the mother, and furnishing her with their advice, upon the best means for restoring to health a beloved child.

To repeated propositions for the administration of various remedies to the little sufferer by each individual of the group, the efficacy of all of which is attested by a reference to their powerful effects in snatching from the grave the child of Mrs. A., B. or C., which “was held just as this little dear is;” the mother replies, “I thank you kindly dear friends for your advice, but as I have already sent for a physician I think it improper to do any thing before he arrives.”

“And pray ma’am, what physician do you employ?”

“Our near neighbour, Dr. Skill.”

“Why I am surprised at that. I can tell you he would not be my choice.”

“And why? Has he not sufficient skill and experience?”

“Oh! as to his skill and experience I have nothing to say. But were the life of a child of mine in danger, I should require something superior to his advice.”

“Why you surprise me Mrs. ———. He has had, I am well

informed, every opportunity for becoming thoroughly acquainted with his profession. Did he shew any particular negligence of disposition during the period of his studies? or has he been an indolent or dissipated man since? Have you heard any thing to that effect?

"I cannot, in truth, say I have. But this I know. For I was told it by the nurse who attended upon him during the whole of his illness; that when Mr. Guilder, the rich old bachelor in Front street, was sick last winter, he certainly mistook a typhus for an inflammatory fever; and had one ounce more of blood been taken than was, the dear man would have been in his grave before this time.—Nay, the bleeder himself, it is whispered, hesitated about obeying the directions of the doctor, for taking away blood the last time he did order it."

"Mr. Guilder, did then recover?"

"Oh yes! more by good luck, however, than by the skill of the doctor."

"Mistakes in regard to the treatment of a violent disease are certainly far from being pleasant."

"Pleasant! what security have you against one as bad now? Such blundering doctors ought not—but I wonder how he ever got a patient after that one."

"If I were you Mrs. ———," remarked another neighbour to the anxious mother, "I would send for Doctor Rheum."

"What! Doctor Rheum," exclaimed the first speaker, "That notorious man of experiment, whom every body is crying out against. Did'nt he give iced water in a burning fever, though the whole world knows it is so hazardous to drink cold things when a person is hot? Nay, by carrying the prescription himself to the apothecaries, my very next door neighbour found out, that he had ordered some poisonous stuff, instead of medicine, for his little daughter, think of that! Such a violent thing for such a poor puny creature as that girl!"

"Suppose," observed a third neighbour, "you were to send for Doctor Senna, nothing like this can be alledged against him."

"He!" quickly replied the recommender of Doctor Rheum, "a Doctor Slop. I'll answer for it, bad as the child is, it will as soon get well under your nurse's prescriptions as under those of such a Doctor."

"You know the Doctor then?"

"Not I! He is employed by none of the families of my acquaintance, nor have I ever seen his gig, if he drives one, stop at the door of any respectable house."

"That is certainly no evidence of his want of ability," remarked the mother of the sick child. "Experience may be obtained by attending families in other neighbourhoods equally as in that to which your observation extends."

"Well, well! that may or may not be so. But a circumstance occurred under my own notice, which proves that he is a very so so Doctor. A poor woman whom I visit occasionally in the way of

charity, was taken with the fever and ague. She had the fever on her three days, hand running; her skin burnt all the time like a coal of fire. And although he gave her ever so much stuff, it only made her worse and worse. Calling in one day and finding her no better, I proposed that she should take barks and wine, but would you believe it, the Doctor said that it was highly improper, and would only cause her fever to increase."

"Did any one hear the like!" exclaimed one of the ladies who had hitherto remained silent, "why every body that knows any thing at all, knows that barks and wine is the only cure for fever and ague."

How many other unfortunate Doctors would have undergone this ordeal of criticism it is impossible to say—had not the conversation of those who sat in judgment been brought to a close by the announcement and entrance of the physician who had in the first instance been sent for. The conclave soon adjourned, no doubt to resume a conversation of similar character, at some other house where a sick person was to be found.

GOOD HUMOR.

That Good Humor contributes to health, is an old saying, the truth of which, a little experience with the world will readily verify. But it may be asked, how does it happen that so many very good humored persons, are nevertheless constantly complaining of aches and ills; the reason is, that the characteristics of Good Humor are very generally misunderstood, and many are complimented upon possessing it, who are really morose and ill tempered: Their good humour consisting only in occasional fits of noisy merriment, too often produced by some temporary excitement, either mental or physical. As gravity, which is frequently but another name for dullness, has sometimes been mistaken for wisdom, so is cheerfulness commonly accepted for good humor. But that species of cheerfulnees which we meet with in society, that laughs in the eye, and lights up the countenance with one continued smile or spends its exuberance in boisterous mirth, will generally be found to proceed rather from some momentary excitement of the spirits, than from a contented mind and happy disposition, desirous of receiving and communicating pleasure under all the circumstances in which its possessor may be placed. As it is called into play by accidental causes, its effects must necessarily be precarious; it is, therefore, subject to causeless and sudden dejection, or is quickly changed into moroseness—while genuine good humor remains ever the same.

An idiot may be constitutionally good natured, and a bad man occasionally cheerful; but that species of good humor which is the result of a good heart, a cultivated mind, and a conscious rectitude of purpose and of conduct, will be uniform in its appearance, and consistent in its manners. It will not, like an April day, lour and shine almost at the same moment; nor like the intense heats of July, merely foretel the approaching thunder storm; but clear,

calm, and undisturbed, will it shine on to the latest hour—"Like the smooth stream, it reflects every object in its just proportions, and in its fairest colours; while the turbulent and ruffled spirit, like troubled waters, renders back the images of things distorted and broken, and communicates to them all that disordered motion which arises solely from its own imagination."* While genuine good humor contributes to the health of the body, the very means calculated to secure the latter, are among the most effectual of those for promoting the former.

PHYSICIAN AND PATIENT.

The first duty of a patient, says Dr. Rush, is to select no person as his medical adviser, who has not received a regular professional education. In no other trade or occupation do mankind rely on the skill of a self taught artist, whilst in medicine, confessedly the most difficult and intricate of the sciences, the world appears to think that knowledge may be intuitive. That astonishing cures have been performed by quacks, is readily admitted, but these have always been accidental, and the disastrous consequences of their blind ignorance and rash presumption although carefully concealed from the public eye, far out-number the records of their success. Patients should prefer a physician whose habits of life are regular and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should confine the care of himself and family as much as possible to one physician, for a medical man who has become acquainted with the peculiarities of constitution, habits and predispositions of those he attends, is more likely to be successful in his treatment, than one who sees them for the first time. A patient who has thus selected his physician, should always apply for advice in what appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

Patients should faithfully and unreservedly communicate to their physician the history of the cause of their disease. This is the more important as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser, he should always bear in mind that a medical man is (or ought to be) under the strongest obligations of secrecy. Even the female sex should never allow feeling of shame or delicacy to prevent their disclosing the seat, symptoms and cause of complaints peculiar to them. However commendable delicacy of mind may be in the common occurrences of life, its strict observance in medicine may

* Blair.

often be attended with the most serious consequences, and a patient sink under a painful and loathsome disease, which might have been readily prevented had timely intimation been given to the physician.

A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

The obedience of a patient to the prescriptions of his physician should be prompt and implicit. He should never permit his own crude opinions as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drinks and exercise. As patients become convalescent they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence but too often, is a relapse.—Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self constituted doctors and doctresses who are to be met with in almost every family, and who all possess infallible remedies for the cure of every disease. However simple some of their prescriptions may be, it often happens that they contravene the plan of treatment adopted by the physician.

A patient should if possible avoid even the friendly visits of a physician who is not attending him, and when he does, he should never converse with him on the subject of his disease, as an observation may be made without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert, for although each of their modes of treatment may be attended with equal success when employed singly, a union of them is very likely to be productive of disastrous results.

When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing. It is to be lamented that the reverse of this is too common. A family physician is often dismissed with less feeling than a servant or even a horse. To this degradation of his profession, is often added the injury of detracting from his character in society, without his having had an opportunity of justifying a real or supposed offence.

MEDICO-LEGAL REMARKS ON POISONING.

The first axiom laid down by the best jurists, says Dr. Ryan, is, that we cannot affirm that poisoning has taken place unless we can de-

monstrate the poison. The questions are, 1st, has poisoning taken place? 2nd, what is the poison? When we answer the first question, the second presents itself as a natural consequence.

The greatest caution is required in giving evidence upon these points, as innocent persons have been executed, and the guilty have escaped, by the conclusions of medical men. We should remember that many diseases simulate poisoning, as cholera, spontaneous perforation of the stomach, ileus, strangulated hernia, and hæmatemesis.

In making the autopsy or post mortem examination, as it is absurdly denominated in this country, we should apply a ligature on the gullet, and another on the rectum, besides one on each orifice of the stomach, so that in removing the whole digestive tube, its contents may be obtained; great care will be requisite in removing the parts, lest incisions or perforations should be made. The contents of the digestive tube should be placed in a glass or porcelain vessel; after carefully noting both the external and internal appearances. We have next to apply the chemical and physical tests, the latter afforded by physiology, pathology, and experiments on living animals. Many of the vegetable poisons may be detected by their physical properties, and we should refer to the special history of those which are most commonly employed by persons in the rank of life of the accused party, or the deceased. Our tests should be of the purest and best description, and we should begin our experiments upon small quantities of the suspected matter, reiterate them and vary them, so as to justify our conclusions, in the most satisfactory manner. We should preserve the results of each experiment, in order to procure the quantity of poison, however small that may be, in each portion of the matter examined. We should never communicate our opinion to the magistrate or other persons unless given in evidence, more especially if it is unfavourable to the accused.

In all cases of poisoning, we should endeavour to discover whether the act is one of suicide or homicide. The age of the deceased, his state of health and intelligence, will assist us in arriving at a safe conclusion. Moral evidence will often afford us assistance, and when the prisoner had been dabbling with the poisons, conversing about them, though not conversant with them by profession; when he has purchased poison shortly before the death has taken place, and under false pretences for poisoning rats, for which purpose he has not applied it; when his conduct has been suspicious during the illness of the deceased, such as preventing medical aid being procured, not leaving the patient, attempting to remove or destroy articles of food or drink, or vomited matter; expressing a presentiment of the patient's speedy death; hastening the funeral, opposing the examination of the body, giving a false account of the illness, having quarrelled with deceased, or acquired property by his death, or relieved from his support, or his knowing that the deceased was pregnant by him. We must collect phials, pill-boxes and papers, which are found in the apartment of the deceased. The

symptoms in every case are to be ascertained, the indications from the autopsy, the chemical analysis, and the physical properties afforded, are to be duly considered, as also the diseases which simulate the effects of the supposed poison; such are the leading points which deserve the greatest attention from the medical jurist in his investigation of cases of poisoning.

JOURNAL OF HEALTH AND RECREATION

PHILADELPHIA, JANUARY, 1833.

The season so far (this seventh day of January,) has been one of extraordinary mildness. One might be induced to believe, regard being paid to the weather alone, that we had passed the vernal equinox in place of having just left behind the winter solstice. The navigation is without obstruction in our rivers, and commerce on this score receives no check. All classes are partakers of the benefits of the benign skiey influences at this time—whether healthful recreation or labour be required. Among the varieties of the former we are pleased to see riding on horseback more freely indulged in than heretofore, especially by the young ladies, whose limbs will acquire an elastic freedom of movement, and their cheeks a roseate hue by this means, which a civic life with its accompaniments of balls, parties and theatre, are calculated so largely to abstract from.

But while present enjoyment need not be marred by anticipations of future ill, it ought not to blind us to the probability of a chequered future, in which shower and storm, sleet and snow, shall prevail over sunshine and balmy breeze. A single night may change entirely the atmospheric scenery, and force us to all the precautions of which we have knowledge, to lessen the intensity of the keen cutting frost. So far the season is not only pleasant but also unusually healthful. We ought not, however, to be ignorant of the fact that extremes or anomalies in any one season are not so much productive directly of diseases at the time, as indirectly, by causing a predisposition to be more readily affected by the succeeding season. They who prize health should have every thing in readiness, whether in domestic economy and household arrangement, or in personal habiliments to protect themselves completely against coming changes. Let not people flatter themselves, by supposing that the winter is nearly over, or the chances of the worst are past, and that abundant fuel and warm clothes will not be called into re-

quisition. Let not the indolent and the procrastinators, who have hitherto neglected these things, imagine that they may be remiss with equal impunity for the remainder of the season. A little reflection—judgment of the future by a knowledge of the past, will tell them better. Shame and disgrace be their lot, who to gratify present whim, or silly show, spend that money which ought to be kept almost religiously in reserve for the necessary wants of themselves and families, especially for those wants which grow out of the inclemencies of the season, and requiring comfortable lodgings, warmth by fuel, and by clothing—good fires, hose, shoes, and flannels.

We have lately received a work by Mr. Cameron, Surgeon, R. N. on *Variety in Diet*. The author is not destitute of judgment, nor are his positions in the main incorrect, and yet such is the effect produced by his unmeasured assumption of discovery, and harping on the importance of his favourite doctrine, that an impartial reader cannot well resist the feeling of repugnance towards a work in which the language of charlatanry is certainly too conspicuous, even although its spirit may not be present. It is the more unfortunate when a man insists on his being the first to see and promulge, as a novelty, that which in fact is part of opinions long held, and practices long tried and approved. The following from the introduction to Mr. Cameron's work, is in a vein of good sense which we wish we could say prevails throughout his book:

“In 1821 the writer joined, as surgeon, his Majesty's convalescent ship *Serapis*, in Port-Royal harbour. Previous to this time, and during the period the *Serapis* had been at Port-Royal, a prevalent opinion extended throughout the squadron that an INFECTION existed on board of her. Every exertion was therefore employed to keep her in the most cleanly condition, &c., and she certainly was in very high order; yet the infection continued. A few days after the writer joined her, ‘a Court of Inquiry’ was held on board, by the Captains of the squadron, in order to ascertain the cause of bad fevers, &c., which frequently originated on board this ship. No conclusion, however, was arrived at on the subject. Immediately after this inquiry, the writer determined, if possible, to trace the cause of the disease; and next morning, on attending the daily issue of provisions to the men, he found that, instead of the proportion of vegetables required by the ‘printed instructions,’ an equal weight of very inferior oranges had been invariably issued in lieu of the proper vegetables, as being much easier obtained in that climate! He felt immediately satisfied that he had found out

the cause of the INFECTION. He remonstrated warmly; the proper vegetables were afterwards issued, and every shade of INFECTION *disappeared from thenceforth*. Not a man died afterwards: and few were taken ill, during the eighteen or twenty months which he remained as surgeon of that ship."

And again in the concluding paragraphs of the work, he says:

"Animal food may be easily supposed to be well adapted to supply nourishment for such textures of the human frame, as agree with it, in the elements of composition; but as the bones, cartilages, &c. require nutriment as well as the muscles, the elementary principles of those must be supplied also. A diet consisting of a proportion of animal food will no doubt tend very much to strengthen our bodies; yet it is not indispensable to the health of man, if he have a sufficient variety of aliment of vegetable growth; and particularly if to this milk is added. On the other hand, we may infer from many well known facts, that no variety of animal food alone, and without vegetables, would long support health; and it is also highly desirable to avoid the predisposition to inflammatory diseases, which is produced by too much animal food.

"I have already observed that in all probability the whole of the inhabitants of these countries consume by far too large a proportion of animal food as aliment. We have succeeded to a great extent, in improving the quality of various species of cattle, which we rear and feed for the sole purpose of being slaughtered and eaten: and lords of the creation as we are, we have robbed the lion, the tiger, and the wolf, &c. of their share, and we now feel dissatisfied that we cannot consume the whole, without the most material injury to our health.

"Let man, therefore, return to the diet which nature intended for him, and which is evidently much better adapted to his wants; let him use a much smaller proportion of animal food, and a much larger of the farinaceous grains, as preparations of wheat, oats, barley, rye, &c. Let milk form part of his aliment, and let him add to this as much of the common vegetables, and fruits in season, as his instinct will prompt him to. Let him avoid spirituous liquors except as a cordial. Let him do all this, and he will enjoy far better health than he does at present. All epidemic, pestilential, malignant, and putrid diseases, will disappear; and many now considered as contagious or infectious, will be no longer known on the face of the earth."

English Society.—The following is, we are afraid, no overcharged picture of a class in England, which some young persons in this country are so silly as to make it their ambition to imitate. To be more exclusively vain, exclusively ignorant, and exclusively wanting in genuine politeness, than the majority of their respectable fellow citizens, is not, one would suppose, the plea for exclusivism

which young ladies and gentlemen ought to prefer; and yet, they offer hardly any better foundation for the claim, who wish to rival London exclusives by imitating the manners and conduct of these latter worthies. Our readers will bear in mind that the subjoined picture is not drawn by a vulgar and disappointed plebeian, who has never been able to enter that "set," which he so severely satirizes; but by an accomplished and titled traveller, who mingled largely in the most fashionable society, attended the levees of the King, supped and dined with royal Dukes and the first nobility of the land; and who withal does not make any pretensions to superior sanctity or very refined morality. The characters must indeed have exhibited repulsive traits to have forced the delineator to draw such a picture.

"On the whole, fashionable Englishmen, however unable they may be to lay aside their native heaviness and pedantry, certainly betray the most intense desire to rival the dissolute frivolity and 'jactance' of the old Court of France in their fullest extent; while in exactly the same proportion the French now seek to exchange this character for old English earnestness, and daily advance towards higher and more dignified purposes and views of existence.

"A London Exclusive of the present day is in truth nothing more than a bad, flat, dull impression of a 'roue' of the Regency and a courtier of Louis the Fifteenth: both have, in common, selfishness, levity, boundless vanity, and an utter want of heart; both think they can set themselves above every thing by means of contempt, derision and insolence; both creep in the dust before one idol alone—the Frenchman of the last age, before his King—the Englishman of this, before any acknowledged ruler in the empire of fashion. But what a contrast if we look further! In France, the absence of all morality and honesty was at least in some degree atoned for by the most refined courtesy; the poverty of soul, by wit and agreeableness; the impertinence of considering themselves as something better than other people, rendered bearable by finished elegance and politeness of manners; and egotistical vanity in some measure justified, or at least excused, by the brilliancy of an imposing Court, a high-bred air and address, the perfect art of polished intercourse, winning 'aisance,' and a conversation captivating by its wit and lightness. What of all this has the English 'dandy' to offer?

"His highest triumph is to appear with the most wooden manners, as little polished as will suffice to avoid castigation; nay, to contrive even his civilities so, that they are as near as may be to affronts:—this indeed is the style of deportment which confers upon him the greatest celebrity. Instead of a noble, high-bred ease,—to have the courage to offend against every restraint of decorum; to invert the relation in which our sex stands to women, so that they appear the attacking, and he the passive or defensive party;—

to treat his best friends, if they cease to have the stamp and authority of fashion, as if he did not know them,—“to cut them,” as the technical phrase goes; to delight in the ineffably ‘fade’ jargon, and the affectation of his ‘set;’ and always to know what is ‘the thing:’—these are pretty nearly the accomplishments which form a young ‘lion’ of the world of fashion. If he has moreover a remarkably pretty mistress, and if it has also happened to him to induce some foolish woman to sacrifice herself on the altar of fashion, and to desert husband and children for him, his reputation reaches its highest ‘nimbus.’ If, added to this, he spends a great deal of money, if he is young, and if his name is in the ‘Peerage,’ he can hardly fail to play a transient part; at any rate he possesses in full measure all the ingredients that go to make a Richelieu of our days. That his conversation consists only of the most trivial local jests and scandal, which he whispers into the ear of a woman in a large party, without deigning to remark that there is anybody in the room but himself and the happy object of his delicate attentions; that with men he can only talk of gambling or of sporting; that, except a few fashionable phrases which the shallowest head can the most easily retain, he is deplorably ignorant; that his awkward ‘tournure’ goes not beyond the ‘nonchalance’ of a plough-boy, who stretches himself at his length on the ale-house settle; and that his grace is very like that of a bear which has been taught to dance,—all this does not rob his crown of a single jewel.

“Worse still is it, that, notwithstanding the high-bred rudeness of his exterior, the moral condition of his inward man must, to be fashionable, stand far lower. That cheating is prevalent in the various kinds of play which are here the order of the day, and that when long successfully practised it gives a sort of ‘relief,’ is notorious: but it is still more striking, that no attempt is made to conceal that ‘crasse’ selfishness which lies at the bottom of such transactions,—nay, that it is openly avowed as the only rational principle of action, and ‘good-nature’ is laughed at and despised as the ‘combe’ of vulgarity. This is the case in no other country: in all others, people are ashamed of such modes of thinking, even if they are wretched enough to hold them. ‘We are a selfish people,’ said a favourite leader of fashion, ‘I confess; and I do believe that what in other countries is called ‘*amor patriæ*’ is amongst us nothing but a huge conglomeration of love of ourselves: *but I am glad of it; I like selfishness*; there’s good sense in it’—and he added, not satirically, but quite in earnest, ‘Good-nature is quite ‘*mauvais ton*’ in London; and really it is a bad style to take up, and will never do.’

“It is true that if you choose to analyze and hunt down every feeling with the greatest subtlety, you may discover a sort of selfishness at the very bottom of everything; but in all other nations a noble shame throws a veil over it; as there are instincts very natural and innocent, which are yet concealed even by the most uncivilized.

“Here, however, people are so little ashamed of the most

'crasse' self-love, that an Englishman of rank once instructed me that a good 'fox-hunter' must let nothing stop him, or distract his attention when following the fox; and if his own father should be thrown in leaping a ditch, and lie there, should, he said, 'if he could'nt help it,' leap his horse over him, and trouble himself no more about him till the end of the chase.

"With all this, our pattern 'dandy' has not the least independence, even in his bad qualities: he is the trembling slave of fashion, even in the extremest trifles; and the obsequious, servile satellite of the fortunate individuals who are higher than himself. Were virtue and modesty suddenly to become the fashion, nobody would be more exemplary,—difficult as would be the task to accomplish.

"Destitute of all originality, and without a thought he can properly call his own, he may be compared to a clay figure, which, for a while, deceives one with all the properties of a human being, but returns into its native mud as soon as you discover that it has not a soul.

"Whoever reads the best of the recent English novels—those by the author of *Pelham*—may be able to abstract from them a tolerably just idea of English fashionable society; Provided (N. B.) he does not forget to deduct qualities which national self-love has claimed, though quite erroneously:—namely, grace for its 'roues,'—seductive manners and amusing conversation for its 'dandies.' I mixed for a while with those who dwell on the very pinnacle of this fool's world of fashion; with those who inhabit its middle regions, and with those who have pitched their tents at its foot, whence they turn longing, lingering looks at the unattainable summit; but rarely did I ever find a vestige of that attractive art of social life, that perfect equipoise of all the social talents, which diffuses a feeling of complacency over all within its sphere;—as far removed from stiffness and prudery as from rudeness and license, which speaks with equal charm to the heart and the head, and continually excites, while it never wearies; an art of which the French so long remained the sole masters and models.

"Instead of this, I saw in the fashionable world only too frequently, and with few exceptions, a profound vulgarity of thought; an immorality little veiled or adorned; the most undisguised arrogance; and the coarsest neglect of all kindly feelings and attentions haughtily assumed, for the sake of shining in a false and despicable 'refinement,' even more inane and intolerable to a healthy mind, than the awkward and ludicrous stiffness of the most declared Nobodies. It has been said that vice and poverty are the most revolting combination:—since I have been in England, vice and boorish rudeness seem to me to form a still more disgusting union."

—*Tour of a German Prince*, p. 304—7.

Wines in England.—In the 'Tour of a German Prince'—the author, describing an English dinner, says, "Every man pours out his own wine, and if a lady sits next him, also helps her; and so

on till the circuit is made, when the same process begins again—Glass jugs filled with water happily enable foreigners to temper the brandy which forms so large a component of English wines.” p. 34.

Again, in another place when speaking of the pleasure and comforts of a London ‘Club.’ “But ‘gourmands’ must ever miss the finest wines, even at the best tables in London. This arises from the strange habit of the English (and these people, too, stick faster to their habits than an oyster to its shell,) of getting their wines from London wine-merchants, instead of importing them from the places where they grow, as we do. Now these wine-merchants adulterate the wine to such a degree, that one who was lately prosecuted for having some thousand bottles of port and claret in his cellars which had not paid duty, proved that all his wine was manufactured in London, and thus escaped the penalty. You may imagine, therefore, what sort of beverage you often get under the high-sounding names of ‘Champagne, Lafitte, &c. The dealers scarcely ever buy the very best which is to be had in the native lands of the several wines, for the very obvious reason that they could make little or no profit by it; at least they only use it to enable them to get off wine of inferior quality.

“Excuse this wine-digression, which to you, who drink only water, cannot be very interesting; but you know I write for us both, and to me the subject is, I confess, not unimportant.” p. 42.

In the Temperance Recorder Extra, for November 6, 1832—we find a document of the highest value to those who would shun the visitations of pestilence and subsequent death. It is entitled “*An Authentic Record of Deaths in the city of Albany, from the commencement to the cessation of the daily reports, in the summer of 1832; omitting all under the age of 16 years.*” The names, sex, age, occupation and general habits of 336 individuals are given in this record who died of cholera. We have room only for an abstract: viz.

Males,	-	-	-	-	-	213	
Females,	-	-	-	-	-	123	
						<hr/>	336
Native White,	-	-	-	-	-	171	
do. Coloured,	-	-	-	-	-	24	
						<hr/>	195
Foreign, Irish,	-	-	-	-	-	108	
do. English,	-	-	-	-	-	15	
do. Scotch,	-	-	-	-	-	4	
do. Welch,	-	-	-	-	-	2	
do. German,	-	-	-	-	-	3	
do. French,	-	-	-	-	-	1	
						<hr/>	138
Unknown,	-	-	-	-	-	3	
						<hr/>	336

Intemperate, - - - -	140
Free drinkers, - - - -	55
Moderate drinkers, mostly habitual,	131
Strictly temperate, - - - -	5
Members of temperance society, -	2
Idiot, - - - - -	1
Unknown, - - - - -	2

336

Premonitory symptoms; diarrhœa, certain, 282; remainder unknown.

Ages. 16 to 20 - - - 11	50 to 60 - - - 47
20 to 30 - - - 70	60 and upwards, - 36
30 to 40 - - - 108	Unknown, - - - 9
40 to 50 - - - 55	— 336

The undersigned physicians, members of the Medical Staff, attached to the Board of Health, residing in the city of Albany, have examined the preceding document of facts, and as such, we take pleasure in recommending its publication and general circulation.

JONA. EIGHTS, M. D. Chairman of the Medical Staff.

WILLIAM BAY,

HENRY GREENE,

C. D. TOWNSEND, M. D. J. JAMES,

JOEL A. WING,

PETER WENDELL.

BARENT P. STAATS, Health Officer.

HENRY BRONSON, attached to north hospital.

Drs. McNAUGHTON and MARCH (members of the Medical Staff,) being absent from town, their names could not be obtained in season.

It is believed that returns of a very similar nature might be made from all the places in which the cholera has prevailed. We had a right to expect full medical statistical details of the disease in this city (Philadelphia) from the two official bodies, viz: the Board of Health, and the Sanitary Committee appointed by the Councils. As yet the duty has only in part been performed.

We shall conclude this article by adducing the testimony of observers in Richmond, Va. on this subject. It will be found confirmatory of the conclusions to be drawn from the Albany Record.

"The cholera has almost entirely disappeared in Richmond. The number of burials in all the places of interment, from the 11th of Sept. to the 15th of Oct. was 487, of whom 98 were whites and 389 were coloured.

"This number (487 interments) includes those who have died of other diseases as well as cholera. The usual mortality in our city, when no fatal epidemic is prevalent, (if we are correctly informed) is about 3 in 2 days. Deducting 50, the number of those who have died of other diseases than cholera since the 11th September, we have remaining 437—which is probably about the number that have been swept away by the pestilence in thirty-four days.

"A great proportion of its victims were of those who had been addicted to the free use of spirit. There is a temperance society in our city, consisting of more than a thousand members. We have made particular inquiry of gentlemen who reside in various parts of our city, to ascertain whether the cholera has prevailed among its members; and as the result of our inquiries, we can hear only of a single individual, connected with this society, who has had the epidemic; and that individual was suffering from the infirmities of advanced age and previous disease, when attacked by the cholera.—[Richmond Telegraph.

POLITICAL ECONOMY:

The following estimates from the Family Lyceum are worthy of general attention; they would furnish our legislators with more available data than many of the pages of Adam Smith.

"The interest of the money expended in erecting a prison at Philadelphia, is sufficient to pay the tuition of ten thousand children at infant schools.

"The expenses of the militia of Massachusetts is not less than half a million annually, which is more than sufficient to establish a LYCEUM SEMINARY, or self-supporting school in every county in the state, at 30,000 dollars each. The one expenditure designed to enable men to kill and devour each other; the other designed to aid each other in every good work.

"In Ohio and the other western States, those towns, which at their commencement, from twelve to fifteen years ago, established schools and public worship, are now accommodated and ornamented with good roads, comfortable dwellings, framed, two stories, and painted, with commodious barns, productive orchards, safe enclosures, and above all, with intelligent, moral, and refined society; while those which have been settled from twenty to thirty years, and have neglected schools and churches, have few buildings but log houses, with one room, no roads but such as nature furnishes, no orchards, no barns, and little cultivated land except a few acres around their cabins, sufficient to raise corn for their bread; and they are even unable to find time to comb their children's heads or wash their faces.

"Throughout New England, those towns whose citizens have erected for their schools, commodious houses, have been able also to erect for themselves neat or elegant dwellings. While those which are unable to build school-houses, are also unable to erect dwellings, except plain, unpainted, one story buildings. Where they are able to erect churches, at an expense of five or seven thousand dollars, they are able to ride in chaises, worth \$250, while those who have the poorest churches ride to them in wag-gons, on horseback, or go on foot."

School Statistics.—About one third of the population of a country are between the ages of three and sixteen or eighteen; and of course are the proper subjects of school education.

In the United States, more than four millions of children ought to be under the influence of schools.

In Maine, the law requires that the inhabitants of every town pay annually for the support of schools, a sum equal, at least, to 40 cents for every person living in it. That amounts to about \$120,000. Their expenditures are more than \$140,000.

In New Hampshire, a separate tax of \$90,000 is raised for

schools, besides an annual appropriation from a tax on Bank Stock of \$9,000 or \$10,000.

In Vermont, more than \$50,000 are raised for schools, from a three per cent tax on the grand list, and as much more from district taxes, besides an income of nearly \$1,000 from banks.

In Massachusetts, are nearly three thousand schools, supported by public taxes and private subscriptions. In Boston, the schools contain more than 12,000 children, at an expense of about \$200,000.

In Rhode Island are about 700 schools, supported by a legislative appropriation of \$10,000 annually, by taxes and by private subscriptions.

The Connecticut school fund is nearly two millions, but fails of its desired object. Children in the state, 85,000; schools about 1,500.

In New York, are more than 9,000 schools, and over 500,000 children taught in them. School fund, \$1,700,000: distributed annually, \$100,000, but on the condition that each town raise by tax, or otherwise, as much as they receive from the fund. A wise provision.

New Jersey has a fund of \$245,000, and an annual income of \$22,000.

In Pennsylvania, during the last year, more than 250,000 children, out of 400,000, were destitute of school instruction.

Delaware has a school fund of \$70,000.

Maryland has a school fund of \$75,000, and an income for schools from the banks, which is divided between the several counties.

Virginia has a fund of \$1,233,000, the income divided among the counties according to the white population, and appropriated to paying the tuition of poor children, generally attending private schools.

North Carolina has a fund of \$70,000, designed for common schools.

South Carolina appropriates \$40,000 annually to free schools.

Georgia has a fund of \$500,000, and more than 700 common schools.

Alabama, and most or all the western and south-western states, are divided into townships, six miles square, and each township into sections one mile square, with one section, the sixteenth, appropriated to education.

Mississippi has a fund of \$280,000, but it is not available until it amounts to \$500,000.

The legislature of Louisiana grants to each parish, or county, in that state, \$2 62½ for each voter, the amount for any other parish not to exceed \$1,350, nor to fall short of \$800.—\$40,000 are applied to educating the poor.

Tennessee has a school fund of about half a million, but complaints are made that it is not well applied.

Kentucky had a fund of \$140,000, but a portion of it has been lost. A report to the Legislature, from Rev. B. O. Peers, says,

that not more than one third of the children between the ages of four and fifteen, attend school.

In Ohio, a system of free schools, similar to that of New England, is established by law.

In Indiana, Illinois, and Missouri, no legislative measures for the support of schools have been adopted. All the schools are supported by private tuition.—*Family Lyceum.*

RURAL ECONOMY.

The Character of a complete Farmer.—We gave, in a former number of this Journal, the character of a French farmer's wife—On the present occasion we place before our readers a sketch of what a farmer himself ought to be. We derive the article from the New England Farmer and Horticultural Journal, a work abounding in excellent matter.

A complete farmer is a most careful, industrious and frugal, as well as reputable and useful man; and unless carefulness, industry and economy are united in the character, it will be an imperfect one. Although a farmer cannot live without labour, by labour alone he never can grow rich and reputable. Much depends upon his *laying out and performing certain kinds of labour in the times and seasons when they ought to be performed.* If he will not cart out his summer dung, nor plough those lands in the fall, which he means to feed in the following spring—if he will not put his seeds into the ground early, and as soon as the season will admit—if he will not attend to his fences and see that they are sufficient—and if he will not cut his grass when it is ripe and do every thing necessary to secure it in good order; he will be perpetually hurried from one kind of labour to another, and every one will be slighted: his flax will not be well coated, nor his grain properly filled out; his corn will be shortened for want of being well hoed, and his grass will become dead, and dry away in the field. Let every kind of labour, therefore, be performed in due season. A complete farmer is also a man of great carefulness and solicitude; without care, the severest labour on the best of farms, will never produce riches nor plenty. If the farmer will not milk his cows in season—see that they are properly tended—go to the male in the right time for the next year's profit; and that his dairy is neatly and carefully managed, he may labour without ceasing, will have a small, poor breed of cattle, and never enjoy a fullness of good butter, and cheese. It is care which makes a flock increase and grow to a good size, which brings forth the profits of a dairy, and which fills the house of the farmer with good things. If he will not carefully inspect his fields and meadows, and see that his fences are in good order, his grass and his corn will be cropt by his cattle: and if he will not gather and put them up carefully and in due season, he will have a short and mouldy crop. If he mows, rakes, and foddors his cattle in a

careless slovenly manner, his flock will be pinched through the winter, and become poor and lousy in the spring—poor oxen too poor to do the labour of the season—poor cows, with little or no milk, and wretched calves and poor horses, too feeble to draw, and too weak to ride with safety. If his swine, poultry and stock in general, and if his carts, rakes and tools of all kinds, are not carefully attended to, the farmer never can grow rich and respectable. It is *attention* which gradually collects from various sources, and covers the soil with manure; it is attention which causes the hills, fields and valleys to yield their increase, and advances and completes the most beneficial improvements.

There is a third virtue without the practice of which, the farmer can never attain to wealth and independence: I mean *economy*.—Without this, both labour in raising, and care in preserving the fruits of the earth, are absolutely thrown away. Economy is an excellent virtue in any man: it is indispensable in the affairs and profession of a farmer. And of this he should never be unmindful when he looks into his barn, his cellar, or his garret, or even his pastures; to say nothing of his fields, mowing lands and meadows. But farmers, as well as other men, are too apt to forget, that in their pursuit after riches, almost everything depends upon economy joined with care and industry.

A frugal, industrious man, blessed with but a common share of understanding, will undoubtedly succeed and advance his interest, beyond whatever he expected, when he first set out in life; provided no singular providential evil should overtake him. More is gained by saving than by hard labour. A farmer therefore whose utmost profits are small and slow, as he cannot grow rich suddenly from his profession, should be a rigid and steady economist. He should consider the saving he may make in everything; in his fuel, tools, clothes, meat, drink, and pocket expenses; above all in his time, which is equal to so much money in hand. Every day that his neighbour runs down to market on his horse, with a pound or two of butter and a few eggs, if he stays at home and keeps steady to his labour, he gets two, if not three days the start of him. While his neighbour wastes his time and spends his money by this imprudent and trifling pursuit, he saves both time and money, in dressing and improving his lands, and which demand all his attention.—There is no leisure hour to be found on a farm from early in the spring, till late in the fall. Through all that whole period, a good farmer knows how to spend every hour profitably on his lands. He can have no time to pass in idleness—in chatting with people as they pass by—in making needless visits—in attending courts, horse races, taverns, and the like. By these means the public is annually deprived of many thousands of bushels of potatoes, corn, tons of hay, &c., and individuals themselves become poor, and fall into the worst of habits—into idleness, gaming, drinking, &c.

There is no kind of economy in the farmer, which will not be well rewarded. Early rising will contribute to his health, and preserve his fields from the inroads of unruly creatures, which com-

monly begin their trespasses just as the day begins to dawn. Close mowing and careful raking, will enable him to winter one cow extraordinary. Feeding his hogs by weeds and other vegetable substances, will enable him to pay the shoe-maker. Scraping his door and barn yards, after rains and showers, will clothe his boy. Saving his early apples, and which are commonly lost entirely, will pay his tailor; his poultry well attended, will pay his maid. His calves will pay his taxes, and some part of his hired labour, if proper care be taken of them. In fine, let a farmer who possesses only fifty acres of good land—who owes no man, and who has a common blessing on the labours of his hands, strictly attend to the management of his affairs, live a life of patient industry, and practise agreeable to the principles of economy, and I think he may live well—may be excused the hardest of labour; leave his hoe and spade to the next generation, by the time he has seen fifty years, when most men begin to think of comfort, ease and independence.

Wind and Rain.—"Hark how it howls!" said the monk, taking his own peculiar view as the clamorous raging of the importunate blast compelled attention to its angry murmurs. "Hark how it howls! telling of shipwreck and desolation and death. Wo to the sea-tossed mariner!—Wo to the anxious and expectant wife, that, waiting the sailor's or the fisherman's return; hears the furious voice of the tempest trumpeting his death at the shaking door of her poor cabin!—Wo to the lordly merchant, whose wealth is on the main, and who hears in every gust the tidings of ruined speculations and broken hopes, and bankruptcy and shame! Well has Satan been called the prince of the powers of the air, and never do I hear the equinoctial blasts go howling and revelling through the pathless sky, without thinking it may be that the evil spirits that hover round mankind are then for a season unchained to ride careering over the earth, and in the agony of their joy to work their will of mischief and dismay."

We spoke of the rain, and I foolishly enough, in mentioning all the annoyance it had occasioned me, loaded it with imprecations.

"Call it not accursed, my son," said the monk—"Oh no! remember that every drop that falls bears into the bosom of the earth a quality of beautiful fertility. Remember that each glorious tree, and herb, and shrub, and flower, owes to those drops its life, its freshness and its beauty. Remember that half the loveliness of the green world is all their gift; and that without them we should wander through a dull desert as dusty as the grave. Take but a single drop of rain, cloistered in the green fold of a blade of grass, and pour upon it one ray of the morning sun—where will you get lapidary with his utmost skill to cut a diamond that shall shine like that? Oh no! Blessed forever be the beautiful drops of the sky, the refreshing soothers of the sealed earth—the nourishers of the flowers—that calm race of beings which are all loveliness

and tranquillity, without passion, or pain, or desire, or disappointment—whose life is beauty, and whose breath is perfume.”—*Henry Masterton.*

A Picture and a Hint.—“Except on the grand matters of pedigree and match making, my good friend Mrs. Leslie, was a sufficiently common person; rather vulgar and dowdy in the morning; when, like many country gentlewomen of her age and class, she made amends for unnecessary finery by unnecessary stinginess, and trotted about the place in an old brown stuff gown, much resembling the garment called a Joseph, worn by our great-grandmothers, surmounted by a weather-beaten straw-bonnet, and a sun-burnt bay wig; and particularly stately in the evening, when silks and satins made after the newest fashion, caps radiant with flowers, hats waving with feathers, chandalier ear-rings and an emrine-lined cloak, the costly gift of a diplomatic relation—(‘My cousin, the envoy,’ rivalled in her talk even ‘my sister the countess’—converted her at a stroke into a chaperon of the very first water.

Her daughters, Barbara and Anabella, were pretty girls enough, and would probably have been far prettier had Nature in their case, only been allowed fair play. As it was, they had been laced and braced, and drilled and starved, and kept from the touch of sun or air, or fire, until they had become too slender, too upright, too delicate both in figure and complexion. To my eye they always looked as if they were intended to have been plumper and taller, with more colour in their cheeks, more spring and vigour in their motions, more of health and life about them, poor things! Nevertheless, they were prettyish girls, with fine hair, fine eyes, fine teeth, and an expression of native good humour, which, by great luck, their preposterous education, had not been able to eradicate.”
—*Match Making.*

Music an Aid to Study.—“I have a passion for instrumental music, but I admire little the human voice, which appears to me, with all our exertions, a poor instrument. Sense and sentiment too are always sacrificed to dexterity and caprice. A grand orchestra fills my mind with ideas—I forget every thing in the strain of invention. A *prima donna* is very ravishing, but while I listen, I am a mere man of the world, or hardly sufficiently well bred to conceal my weariness.

“The effect of music upon the faculty of invention is a subject on which I have long curiously observed, and deeply meditated. It is a finer prelude to creation than to execution. It is well to meditate upon a subject under the influence of music, but to execute, we should be alone, and supported only by our essential and internal strength. Were I writing, music would produce the same effect upon me as wine. I should, for a moment, feel an unnatural energy and fire, but, in a few minutes, I should discover, that I

shadowed forth only phantoms, my power of expression would die away, and my pen would fall upon the insipid and lifeless page.—The greatest advantage that a writer can derive from music is, that it teaches most exquisitely the art of development. It is in remarking the varying recurrence of a great composer to the same theme, that a poet may learn how to dwell upon the phases of a passion, how to exhibit a mood of mind under all its alterations, and gradually to pour forth the full tide of feeling.—*Conlarani Fleming.*

Genius of Auctioneers.—"It is not uninteresting to attend auctions here (London); first, on account of the multitude of extremely rare and valuable things, which from the wonderful activity of life and the constant vicissitudes of fortune are daily brought into the market, and often sold very cheap; and secondly, for the ingenuity and eloquence of the auctioneers, of which I have already made honorable mention. They embroider their orations with more wit gratis, than ours would be willing to furnish for ready money.

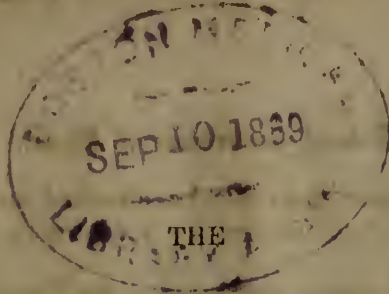
"This morning I saw the sale of an Indian cabinet, the property of a bankrupt Nabob, which contained some curious and beautiful works of art. 'The possessor of these treasures,' said the orator, 'has taken much trouble for nothing; for nothing to himself, I mean, but a great deal to you, gentlemen. He had once doubtless more money than wit, but has now, as certainly, more wit than money.' 'Modesty and merit,' observed he afterwards, 'go together only thus far,—both begin with an *m*.' And in this style, and with such 'jeux de mots,' he continued.—'What enables the poor to live?' concluded he. 'Charity or liberality do but little towards it. Vanity, vanity is the thing,—not theirs, poor devils, but that of the rich. If you then, gentlemen, will but display a little of this praiseworthy vanity, and buy, you will earn a blessing even without meaning it.'"—*Tour of a German Prince*, p. 69—70.

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"As much as in thee lies, live at heart's ease."

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[No. 6.]

MEDICAL GEOGRAPHY OF EGYPT.

The physical qualities of Egypt are not less remarkable than its stupendous works of art and its early civilization. It presents itself to the eye of the traveller as an immense valley, extending nearly 600 miles in length, and hemmed in, on either side, by a ridge of hills and a vast expanse of desert. Viewed as an alluvial basin, it owes its existence entirely to the Nile, which flows through it from south to north, conveying annually to the inhabitants the main source of their agricultural wealth, salubrity to their climate, and beauty to their landscape. The breadth of the cultivated soil varies, of course, according to the direction of the rocky barriers by which its limits are determined,—spreading, at some parts, into a spacious plain, upwards of 100 miles broad, while at others it contracts its dimensions to less than two leagues. The mean width has been estimated at about nine miles; and hence, including the whole area from the shores of the Delta to the first cataract, the extent of land capable of bearing crops has been reckoned to contain ten millions of acres.

It is an observation as old as the days of Herodotus, that Egypt is the gift of the Nile. This historian imagined that all the lower division of the country was formerly a deep bay or arm of the sea, and that it had been gradually filled up by depositions from the river. He illustrates his reasoning on this subject by supposing that the present appearance of the Red Sea resembles exactly the aspect which Egypt must have exhibited in its original state; and that, if the Nile by any means were admitted to flow into the Arabian Gulf, it would in the course of twenty thousand years, convey into it such a quantity of earth as would raise its bed to the level of the surrounding coast. I am of opinion, he subjoins, that this might take place even within ten thousand years; why then might not a

bay still more spacious than this be choaked up with mud, in the time which passed before our age, by a stream so great and powerful as the Nile?*

The men of science who accompanied the French expedition into Egypt undertook to measure the depth of alluvial matter which has been actually deposited by the river. By sinking pits at different intervals, both on the banks of the current and on the outer edge of the stratum, they ascertained satisfactorily,—first, that the surface of the soil declines from the margin of the stream towards the foot of the hills; secondly, that the thickness of the deposit is generally about ten feet near the river, and decreases gradually as it recedes from it; and, thirdly, that beneath the mud there is a bed of sand analogous to the substance which has at all times been brought down by the flood of the Nile. This convex form assumed by the surface of the valley is not peculiar to Egypt,—being common to the banks of all great rivers where the quantity of soil transported by the current is greater than that which is washed down by rain from the neighbouring mountains. The plains which skirt the Mississippi and the Ganges present in many parts an example of the same phenomenon.

This source of fertility to Egypt depends exclusively, as every reader knows, upon the periodical rains which drench the tableland of Abyssinia and the mountainous country which stretches from it towards the south and west. The ancients, some of whom indeed entertained very absurd notions respecting the cause of this phenomenon, were generally in the right as to its physical origin,—expressing their belief that the annual overflow of the Nile was closely connected with the climate of Ethiopia, that receptacle of clouds and vapour. Plutarch states most distinctly that the increase of the Egyptian river is owing to the rains which fall in Abyssinia. Even the Arabs had arrived at the same conclusion long before any European found his way into the country.* More than seven hundred years ago, a failure in the inundation was announced to the farmers of Egypt by a clerical envoy from the chief city of Ethiopia; who, after having stated that the season in the hill country had been unusually dry, advised them to expect and prepare for the unwonted lowness of the Nile, which actually occurred.

It is impossible to find any where among terrestrial objects a more striking instance of the stability of the laws of nature than the periodical rise and fall of this mighty river. We know, by the testimony of antiquity, that the inundations of the Nile have been the same with respect to their height and duration for thousands of years; which, as Humboldt remarks, is a proof well worthy of attention, that the mean state of humidity and temperature does not vary in that vast basin.† The rise of the water is so regular that the inhabitants of Lower Egypt look for its arrival with the same

* Euterpe, chap. ii.

† History of Egypt by Abdollatiph, quoted by Shaw, vol. ii. p. 215.

‡ Pers. Nar. vol. iv.

degree of confidence as if the blessings which it brings along with it depended upon causes within their own control.

The value attached to this gift of nature is esteemed so great as to be made the subject of political regulation, and the main source of public revenue. When it rises to sixteen cubits, the prosperity of the country and the wealth of the exchequer are secure. But, unfortunately, influenced by avaricious motives, the power of a despotic government is employed to mislead their own people in the first instance, and, through that channel, the more scientific nations of Europe, in regard to the actual rise of the inundation. It has been suspected that the notices issued by the guardians of the Mekyas, or Nilometer, have a reference to the taxes which the ruler of Egypt intends to levy, rather than to the real increase of the fertilizing fluid from which they are to be derived. It was first suspected by Niebuhr, and afterward fully ascertained by the French, that the number of cubits announced in the daily proclamation of the height of the river is not to be relied upon. The real state of the inundation is concealed for political purposes; and as a proof of this, it is mentioned by M. Girard, that, in 1801, when the public crier gave notice that the water had attained twenty-three cubits two inches, it stood in reality at only eighteen cubits. Hence the difficulty of obtaining an accurate statement on this head, and the impossibility of comparing with suitable exactness the fluctuations of the river in ancient and modern times.

Considering how much the Egyptians owe to the Nile, it is not surprising that in rude ages they should have been induced to make it an object of worship. Not only does it supersede the labour of the plough and the necessity of collecting manure, but it also supplies an abundance of that element which is the most necessary to human existence and comfort, and which to a native of Egypt is, at the same time, a medicine and a luxury. The Egyptian, in short, like the Hindoo, finds his chief solace in his beloved river. Its water is preferred to the most costly beverage; he even creates an artificial thirst, that he may enjoy the delight of quenching it; and, when languishing under disease, he looks forward to the approaching inundation as the season of renovated health and vigour. Nor is this predilection to be ascribed to bigotry or ignorance. On the contrary, we find that Europeans are equally loud in their eulogies on the agreeable and salubrious qualities of the Nile. Giovanni Finati, for example, who was no stranger to the limpid streams of other lands, sighed for the opportunity of returning to Cairo, that he might once more drink its delicious water, and breathe its mild atmosphere. Maillet, too, a writer of good credit, remarks, that it is among waters what champaign is among wines. The Mussulmans themselves acknowledge that if their prophet Mohammed had tasted it, he would have supplicated Heaven for a terrestrial immortality, that he might enjoy it forever.

The Copts, with the feeling natural to Christians of the Greek communion, have fixed upon the 24th of June, the festival of St. John, as the day which affords the first decisive token of the annual

flood. Travellers, however, inform us that in ordinary years, it is not till the first week in July the rise can be distinctly marked. It is true, that at a much earlier part of the season there is a temporary swell in the current, occasioned by partial rains which fall within the tropics soon after the vernal equinox; but the real inundation does not commence till the period already mentioned, and even then very imperfectly. By the middle of August it has reached half its elevation, but it is not at the highest till towards the last days of September. It then continues stationary about two weeks, when it begins gradually to subside. By the 10th of November it has fallen one-half, from which period it diminishes very slowly till the 15th or 16th of the following May, when it is understood to have reached its lowest ebb. During the increase the water first acquires a green colour, sometimes pretty deep; and after thirty or forty days this is succeeded by a brownish red. These changes are probably owing to the augmentations it receives from different temporary lakes in succession, or from the rains which fall at various distances on the table-lands in the interior of Africa.

The mud of the Nile upon analysis gives nearly one-half of argillaceous earth, with about one-fourth of carbonate of lime; the remainder consisting of water, oxide of iron, and carbonate of magnesia. On the very banks the slime is mixed with much sand, which it loses in proportion as it is carried farther from the river, so that at a certain distance it consists almost entirely of pure argil. This mud is employed in several arts among the Egyptians. It is formed into excellent bricks, as well as into a variety of vessels for domestic use. It enters also into the manufacture of tobacco-pipes. Glass-makers employ it in the construction of their furnaces, and the country people cover their houses with it. As it contains principles favourable to vegetation, the cultivators consider it as a sufficient manure for such places as have not been saturated by the overflowing of the river.

Although the Nile is almost without exception the minister of good to Egypt, there are yet cases in which the excess of its waters has occasioned no small loss both of life and property. In September, 1818, Belzoni witnessed a deplorable scene, owing to the river having risen three feet and a half above the highest mark left by the former inundation. Ascending with uncommon rapidity it carried off several villages, and some hundreds of their inhabitants.

For various reasons, especially the want of wood and the low elevation of the whole plain from Rosetta to Assouan, the average degree of heat in Egypt is considerably greater than in many other countries situated in the same latitude. In summer, as long as the sun remains above the horizon, the atmosphere is inflamed, the sky is cloudless and sparkling, and the heat is rendered supportable only by the profuse perspiration which it excites. At Cairo, the medium temperature during that season has been estimated at ninety-two degrees of Fahrenheit's thermometer. On some occasions it has been known to rise as high as one hundred and twelve degrees; but such an intensity of heat is usually of short continuance, and

almost never experienced except in the more confined districts of Said. At sunset the wind falls, the air becomes cooler, and the vapour suspended in the atmosphere during the day is deposited in an abundant supply of dew. As the evening advances, a thin mist darkens the horizon, and spreads over the watery grounds; but during the night it becomes scarcely perceptible, and in the morning, when the sun has attained a certain elevation, it gradually ascends in the form of flaky clouds.

In Alexandria the thermometer in the summer months seldom ranges beyond 88 or 90 degrees. The greatest degree, however, of heat here is by no means so oppressive as a much lower temperature is at Cairo. I have found, (says Madden,*) 75 degrees at Malta almost intolerable; I bear 90 degrees here without any inconvenience. The thermometer in Egypt is no criterion of the temperature, so far as regards the effects of heat on the human body. The *Kamsin* wind, which, as its name imports, reigns about fifty days, from the first of May to the 20th of June, is attended with such languor and exhaustion, that I have often lain for hours on my divan incapable of the slightest mental or bodily exertion. This easterly wind is sometimes called the wind of the desert, the poison "wind *Simoom*," from *sem*, poison, and *yam*, day. It is not indicated on the thermometer by a corresponding height of the quicksilver. It does not produce a difference of more than five or six degrees. The Etesian gales, or north-west winds, blow up the Nile from June till September; the freshness of Alexandria, in the summer months, is owing to these salubrious breezes. By the 24th of June, St. John's day, the country here, which has had no rain from March, is completely parched, there is not a particle of verdure, the soil is split into innumerable cracks, the trees are scorched, the only plant that survives the drought is the alkaline sal soda, which covers the burning sands, even when all nature seems perishing for moisture, which the rain is not destined to afford, nor yet the Nile, which is only then increasing; a heavy dew, called the *Nocta*, begins to fall about St. John's day; the drooping plants again revive, the plague ceases altogether, or decreases daily, and a new disease is ushered in, which all who are subjected to the influence of the *nocta*, are almost sure to catch, that is dysentery; ophthalmia too begins to prevail, and the stranger who leaves his window open at night is almost sure to catch one of these disorders.

It will, no doubt, appear surprising that trees five and six hundred years old, such as the sycamores in Upper Egypt, should thrive without a drop of rain; or, if highly situated, without deriving any moisture from the inundation. The *nocta*, in Lower and Middle Egypt, answers the purpose of both; but, in Upper Egypt, I have left a sheet of paper exposed to the air all night, without its imbibing a particle of moisture. Indeed Alexandria, at all times, is excessively damp; the atmosphere is saturated with a saline vapour, which condenses on the walls and furniture of the houses, in small

* Travels in Turkey, Egypt, &c. Letter xvi.

crystals of nitre, muriate of soda, and muriate of ammonia; the soil is every where coated with these saline particles; and although it is quite impossible to keep any articles, made of iron, free from rust, yet the constant breathing of this saline atmosphere does not appear to be prejudicial to health; diseases of the lungs are unknown. I have not seen one case of pulmonary consumption among the Arabs.

In Alexandria, Damietta, and Rosetta, there is more or less rain, from November till March; and, sometimes, excessively cold weather. But in Cairo, there is much less of both, though only one hundred and fifty miles from this town; and in Upper Egypt, there is no rain, perhaps, for six years, or even ten; but when it does come, it is in torrents. Many birds leave Egypt during the intense heat of summer; and the swallows of Europe come here in the winter. I have seen them arriving in thousands: it appears that their last starting point, in Europe, is the *Morea*. All Egypt, in the vicinity of the river, is a lake, from the beginning of August to the end of October, owing to the inundation of the Nile. The people go in boats from one village to another, sailing over fields of corn. Acacias, cassias, and tamarisks appear to be rising from the bottom, and one can hardly bring oneself to think that, after a little time, the sea before us will be dry land, and produce two or three crops in the course of a year.

From this period to the beginning of April, the country assumes a new aspect; the Nile subsides, the waters drain away, and the soil is covered with a rich slime, in which consists the fertility of Egypt. The latter end of October and November, agriculture commences: the corn is sown with little labour; and again, the vegetable world springs into life, after a three months' deluge. Towards the beginning of January, the trees are clothed with new foliage, the new *spathæ* of the date tree come forth, and the fruit begins to appear. The harvest ends in April. The land is again turned up with a wretched plough, named *marha*, sown as before, and smoothed with a large piece of wood attached to oxen, buffaloes, or donkeys.

It is now necessary constantly to irrigate the land; for this purpose the water is conveyed from the Nile by small canals, and as it is far beneath the level of the soil, it is raised by the old *Persian* wheel, still in use here, round which earthen jars are fixed, and the wheel is turned round by buffaloes and bullocks. The constant creaking of these innumerable wheels all along the Nile, both night and day, is excessively annoying.

This second harvest is gathered in before August, the period of the overflow, but in the Delta, they get in the second harvest sufficiently early to have a third. They thrash their corn by placing the sheaves in a circle: round this they drive a team of bullocks, dragging after them a sort of chariot, the wheels of which are round plates of iron. This method is very injurious to the corn, and destructive to the chaff. The great cause of the uncultivated state of the country, is the trouble of preserving the canals, and the expense of irrigation; formerly those deserts which we now behold, were

fertile plains, watered by magnificent canals, which the degenerate race of Egyptians are now unable to keep from filling up.

If they dig a new canal, they use no shovels, no carts, no wheelbarrows, for nothing of the kind is known in the country; they scoop out the earth with their hands, they deposite it in small boxes, carry it on their heads to a convenient place, walk back very leisurely and take another load, perhaps weighing fifteen pounds. I have seen five hundred men working at the Great Canal, between Alexandria and the Nile, when fifty men in this country, with the proper implements, would have done infinitely more work.

Such is an imperfect sketch of the peculiarities of climate; and, in Alexandria, I should have noticed the serenity of the lovely blue sky of Egypt, never obscured by a cloud, except when the Etesian winds are driving those clouds from the Mediterranean, along the Nile, which are to constitute the principal source of the inundation. At Alexandria there are many local causes, which render the climate the most insalubrious in Egypt. The first is the dearth of cultivation all around it: Volney has well remarked, that "*Alexandria* belongs to the African desert, and has nothing of the fertility of Egypt:" the second is the vicinity to the lake of *Mareotis*, which is now a saline swamp. The third is the neglect of the subterranean reservoirs for water, which formerly conduced to the cleanliness and comforts of an industrious people, and now only serve for the generation of mephitic air. These causes suffice to render Alexandria peculiarly unhealthy in the spring and autumn. That quarter of the city nearest the lake is never exempt from intermittent fevers in the spring, and malignant putrid fevers in the autumn.

A DAY OF FREDERIC THE GREAT.

Aware of the extensive and various nature of his duties as king, and fully determined never to delegate to others the labours which he considered to belong to his own situation, Frederic, at the commencement of his reign, made a regular distribution of his time, to which he adhered with the most rigid exactness; and in which he made very few alterations, during the forty-six years that he swayed the Prussian sceptre. His first care was to ensure his early rising, for he knew full well, that without that habit, much business could not be got through in the course of the day. He therefore ordered his servants to wake him at four o'clock, at which hour he intended to leave his bed. They did so; but Frederic was naturally inclined to sleep, and therefore he always begged for a little more time, which it may be easily supposed he obtained without difficulty; and thus, instead of four, he usually rose at six. In vain he scolded and commanded, for the next morning always found him entreating for more sleep; and where were the attendants that could resist the requests of a despotic monarch? Finally, determining to vanquish himself and his nature, he commanded the person who called him, under pain of being made a common soldier for life, every

morning to put upon his face a towel dipped in cold water. By this violent measure he conquered his natural somnolency, and continued to rise at four o'clock till an advanced period of his life.* His dress, which was always the same, the uniform of his guards, with military boots, was put on in a very few minutes; indeed, the whole business of his toilet was completed in less than a quarter of an hour. A single valet-de-chambre lit his fire, shaved him, and curled his hair. He was not possessed of either slippers or bed-gown; only, Thiebault says, when he was very ill, he occasionally, but very rarely, put on a sort of linen wrapper; but even then he wore his boots. He hardly ever wore coats of other colours: and he appeared in silk stockings, as ~~has been before mentioned~~, only on one day in the year; namely, when he went to the court of his wife, upon her birthday.†

As soon as he was dressed, one of his pages brought him the packet of letters which had arrived for him by the post, or in any other way, and which had been delivered to the page by the secretaries of the cabinet. The king occupied himself in reading these letters, which were often very numerous, till eight o'clock. He was, above all, peculiarly exact in observing whether the seals appeared to be broken or not; fearing, and with reason, that sometimes the secretaries might be tempted to read and suppress letters of which the contents were displeasing to them. From a long habit of looking at the seals of letters, he had become well acquainted with many, and knew to whom they belonged; in consequence of which knowledge, he frequently threw letters into the fire, or tore them to pieces, without reading them. Among other precautions contrived by Frederic to prevent the suppression of letters addressed to him was the following:—Each master of the post was obliged, with any letters he forwarded to the king, to send a list of them, as well as of the address of each person who wrote them; those who wrote to the king being commanded to leave at the post office to which they confided their letters the place of their residence. In spite of this and other precautions, letters, according to Thiebault, were sometimes suppressed by the secretaries, who managed to alter the lists sent by the postmasters.

The different letters which the king opened he distributed into three parcels: in the first were those whose requests were favourably received, and these were marked by the sheet of paper being doubled inwards; in the second, whose petitions were refused, the sheet was doubled outwards; and the third, respecting which he doubted, and therefore wished to delay answering, had the sheet doubled partly inwards and partly outwards. About eight o'clock, the letters being all sorted, one of the four secretaries of the cabinet entered, and received the three parcels from the king. He then, while the king was at breakfast, read to him the request contained in each, reducing it to as few words as possible. The king dictated the answer equally shortly, except in cases where peculiar

* Thiebault, *Souvenirs de Vingt Ans de Sejour a Berlin.*

† *Ibid.*

detail was necessary. Above all, when the answer to be made was to a woman, he never failed to add, "It is a woman; you must write civilly to her." The secretary made a particular mark on the top of each letter, according to the answer which was to be returned. This mark was a sort of cipher, understood by the other secretaries, and by them alone. Of course this distribution of letters did not include the private correspondence of Frederic with his friends, or with the men of talents and celebrity, with several of whom at different periods of his life he corresponded; these letters were always answered with his own hand.

When the secretary came out of the king's apartment, he divided the letters with his three brethren, and they all immediately proceeded to write the answers, for which they had barely time enough, as it was necessary that they should be all brought to the king for signature, at the latest, at four o'clock. All the labour of making the answers, as well as of copying them, was done by their own hands, as they were not allowed to have the assistance of any other persons. At the time of the signature, the king always read a few of the letters, which he took, as chance directed his hand, out of the packets; and if, in this examination, any letter had been found wrongly answered, the secretary who had done it would have been immediately dismissed. After the signature, the secretaries had to fold, to seal, to put in covers, and to direct the letters: the latter office was ordered to be performed by the secretaries themselves; in the former ones they were allowed to be assisted by their servants. At five o'clock all the letters were delivered to the courier, who carried them to Berlin. As soon as he arrived at the latter place, those answers which were addressed to individuals in the town were forthwith delivered to them, and the others were put into the post. Therefore those persons who did not immediately receive answers to the letters they had written to the king were almost sure not to have any at all; unless the nature of their request had required it to be communicated to some minister, and thereby occasioned delay.

Frederic obliged his secretaries to live in the greatest solitude, and to communicate as little as possible with any one; and he hardly ever took one into his service who was married. These precautions were taken in order to prevent their being tempted to commit infidelities with regard to his correspondence. Their life was one of great labour and constant slavery; and they never dined, but were supported during the day by soups: the supper was their principal meal. To make up for these privations, their salaries were large, and they had each a good house, granted to them by the king. To give some notion of the strictness with which Frederic expected his secretaries to conform to the rules and way of life he had prescribed for them, it may be as well to quote his speech to the Counsellor Muller, upon offering him one of the places of secretary to the cabinet. Muller was one of the few instances of a married man permitted to hold the situation. "I propose to you," said the king to him, "to immolate yourself to the

service of the state. Consider well whether you have the courage to do so. I had resolved never to employ a married man in my cabinet, and I know that you have a wife and children; it is therefore an exception to a very important rule that I determine myself to make in your favour. I do it in consequence of the particular esteem I have for you, and of the firm hope I entertain that your wife and your children will never approach the room where you write, that they will know nothing, and will not meddle with any affairs. In a word you will never forget that, for the good of my service, you must neither have family, nor relations, nor friends!''*

With regard to the manner in which he was addressed, and as to whether sufficient respect was shown, either in the way of writing or in the terms employed, Frederic was perfectly indifferent; but there was one point upon which he was generally known to be very particular, and that was, that the letter should not occupy more than the first side of the sheet of paper. Letters which turned the page were sure to excite his anger, to be ill received, and dryly answered.

At nine o'clock, when Frederic had sent away his secretaries, he gave audience to his first aid-de-camp, who was for the most part a general officer. With him he arranged every thing relating to military affairs, in all their branches; and he then dismissed him loaded with business, which was to be completed by the next day. At ten o'clock, he frequently exercised his own regiment of guards, or some other regiment of the garrison of Potsdam. After this he attended the parade, which occupied him till dinner-time. Sometimes, though, he devoted this part of the day to his literary pursuits, to music, or to his private correspondence; and, as he advanced in age, this habit became more frequent. During this period of the day he composed almost all his works, as well in prose as in verse; and in the course of these occupations he was frequently seen walking in his gardens, with a book under his arm, accompanied by three or four Italian greyhounds, and followed by a single page or footman. It was also at these hours that he gave his audiences; and placed all the accidental occupations which had no other times allotted to them.

At twelve precisely, he dined with those guests whom he had invited,—whose invitations were always sent to them at ten o'clock the same morning. These guests consisted ordinarily of literary men, of his relations, the princes of the house of Brunswick, of a certain number of his courtiers, and of the general officers at that time at Potsdam. If he did not intend walking after dinner, he usually prolonged that repast till near three o'clock. As he was at all times of his life peculiarly fond of good living, his dinners were excellent, except that he insisted upon each dish being very highly seasoned with pepper and spices. He had twelve cooks of different nations, who were each expected to dress the particular dishes which belonged to their respective countries. His desserts were

* Thiebault, *Souvenirs de Vingt Ans de Sejour a Berlin.*

also admirably served, as he ate much fruit, and considered it to be essential to his health. He preferred French wines, and above all, champaign. At dinner he unbent himself from the labours of the day, and was almost invariably gay and willing to converse.

During the fine season Frederic was accustomed to take long walks after dinner. His most common walk was from the palace of Sans Souci, where he passed that part of the year, through his gardens, to what is called the New Palace; a considerable distance, which he generally walked with so quick a pace, as to render it difficult and even painful to the persons who accompanied him to keep up with him. At four o'clock the secretaries of the cabinet brought him his answers to the letters of the morning to sign; after which he generally received the person who held the situation of secretary of his commandments. With him he transacted all the affairs and correspondence relative to the Academy, to the professors of the different schools, to men of learning, and artists. If nothing was required to be done upon these subjects, this period of the day was then devoted either to reading or literary compositions. At six o'clock his concert commenced, in which he himself played upon the flute. Of this instrument he was passionately fond, and was a great master in the art of playing upon it. He continued the use of the flute till an advanced period of his life, when, his teeth being all gone, he was no longer able to produce the sounds he wished.

After the concert, which lasted an hour, he occupied himself in conversation till supper, which took place at ten o'clock. At eleven o'clock, at the latest, the king was in bed. After the seven years' war Frederic ceased to sup, and then his evenings concluded with a conversation with the persons whom he had summoned to attend him. Such was with very few exceptions, the disposition and occupation of Frederic's days, during the course of his long life.

ON THE SPORTS OF CHILDREN.

Mr. Editor.—A most interesting discussion took place during the last session of the American Institute in Boston, on the propriety of a teacher's joining in the sports of his pupils. It seemed to be the prevailing opinion that much depends on the particular character and temper of the teacher; that while many teachers can secure and preserve a proper respect from their pupils; and yet join in their sports, and be on the most intimate and familiar terms with them, others of different character, would, by a similar course, lose their confidence entirely. During the discussion, an experienced instructor remarked that the sports of children, such as running, playing at ball, skating, &c., were all appropriate, and most teachers would probably find it useful to join in them. But he added that something more than this might be effected during a part, at least, of the time usually devoted to these sports. He had been in the habit of going into the fields with his pupils, to search for min-

erals, plants, insects, flowers, &c. Sometimes he had taken them to some brook, river, mountain or pond. Suppose it were a stream; his pupils were required perhaps to imagine it to be the St. Lawrence; then to locate the city of Quebec, and actually proceed to build its walls in miniature, divide it into the upper and lower town, &c. This was verifying their knowledge of the *geography* of the place. But much of *history*, too, might be verified in the same way. Here, they would say, are the heights of Abraham; here Gen. Wolf, with his army ascended—and here he fell. Other facts, historical and geographical, could easily be elicited.—He thought it highly important to employ the pupils of our common schools, generally, in some such *useful* sports, at least a part of the time.—His remarks were highly interesting, and deserving of the serious consideration of all who have the care of children.

I could not avoid the reflection, however, that there is danger of carrying this matter too far. For one, I am fully persuaded that although few pupils actually *study* too much, yet by far the majority are confined to their rooms and their benches *too long*, by one half. If they are to be kept in the school room six or eight hours daily—to get lessons, or pretend to get them at home besides—and if, in addition to all this, the hours usually allotted to active, vigorous exercise are to be spent in these *half* active employments of the body, I cannot help thinking that health must soon suffer.

If four hours were allowed to active athletic exercises, either agricultural, mechanical, or gymnastic, or all of them; two to study in the fields, or woods, as was proposed by the teacher above mentioned; and only *four* devoted to the study of books, I think several points would be much more effectually secured than they are at present.

1. Less of the time devoted to books would be spent in listlessness than now. Instead of being regarded as mere drudgery, application would be a pleasure, and habits of attention would be secured with little difficulty. It is not desirable, in my opinion, to make everything sport. There must be attention; there must be habits of application; these all cost efforts which will be more or less painful. Such is the state of the world and of human nature, that real progress is almost always *against*, seldom *with* the current.

2. In this way, time would be left for two hours' study in the fields, the play ground, or the garden; or elsewhere in the open air. This, after four hours of hard study, would be pleasant; and might, in a measure, serve as an amusement, or a healthful physical exercise. It is probable that two hours in the school room in each half day, followed by one in the field or shade, as above, would be far better than to study hard *four hours in succession*; unless the hours of study were in the morning.

3. Six hours spent in this manner, would I think be sufficient for one day, and the rest of the time might be devoted to productive physical exercises. I say *productive*; but explanation is here necessary, because the term has in my view, been often abused.

Agriculture and horticulture, as they are carried on in the open

air, have some advantages over the *mechanical* employments; but I regard all of these as indispensable to every school. If the tools and implements of mechanics and husbandry are adapted to the size, age, and strength of the pupils, their labours may be directed to the construction of something useful—and even without direction, their ingenuity would suggest to them the idea of making many things, which would be serviceable. Thus their labours would be *productive*, in the narrow sense of the term. But this is not all. The labour bestowed by the cultivator of the soil with reference to an immediate crop, merely, must never be regarded as the only effort which is productive. If he remove the rocks, clear up the hedges, improve the fences, devise means to secure the soil from damage, excessive rains, &c., &c.;—all this labour, as it is a work of preparation for the future, is *productive*, in the appropriate sense of the term, although he may not, for a single year, reap much if any additional corn, grain, or fruit. This is perfectly obvious, and will doubtless be admitted. So the labour of plodding through Latin or Mathematics may at first view seem to be *lost* labour, because the fruits do not appear in the cluster at once. But every one knows, at least every one acquainted with the human mind, that as a work of mental discipline—a work of preparation—much of this very labour is, prospectively, as productive as any to which the student can possibly be called.

Now it is also true that much of the physical exercise which youth demand, may appear to the superficial observer unproductive, and even useless. Perhaps he sees a boy devote half an hour to what have often been called gymnastic exercises. “What,” says he, “is the use of all this? Nothing is gained by it. Let the boy be put into the field or garden, and his muscular effort might be turned to some good account. Away with your gymnastics. The best gymnastics are the plough, the hoe, the spade and the scythe.”

But these are mistaken views. Whatever exercises are indispensable to complete muscular and organic development, are as useful in the result, and as truly productive as any other. Is not the perfect and harmonious development of every mental faculty indispensable? And without this is not man in a certain sense, what he has sometimes been called,—a *monster*? But are not mind and heart dependent, to a very great extent, upon *physical development*? If any portion of the physical structure be imperfectly developed, is not even the body imperfect? How much more then, that *intellect*, and those *moral sentiments*, which are so dependent upon the body, and of which the latter is the appointed vehicle!

Who then shall say that any physical exercise which tends to improve this companion or vehicle of mind and soul, is unproductive? And is it not even our duty to study to improve our bodies to the highest pitch, not only for the sake of beauty and symmetry and health and enjoyment, but for the sake of the immortal mind and heart?

It is in this view that I have been pained to hear gymnastics denounced by those who are unwilling, like the husbandman, to wait

patiently for results—"the early and the latter rain;" or who are more or less ignorant on the subject, or perhaps prejudiced. It is a narrow sighted being that will not make a single manly effort to see more than "the nearest link in the great chain" of cause and effect;—that will not plant or sow unless he can reap in the next hour.

By productive exercise, then, it will be seen that I mean agriculture, and horticulture and mechanics;—and not only these, but MUCH MORE. Whatever promotes the present, or paves the way for *future* vigour of body, and consequently of mind, is eminently productive. I do not believe that any of the ordinary employments of life, as labour is now divided, will ever completely effect this: and consequently other exercises appear to me indicated.

Here I shall be asked whether the great Educator did not know what was necessary to the complete physical, intellectual and moral development of the first pair, and whether this was not effected by manual labour merely. I answer, we do not know; nor is the argument which the objector would draw from an answer or decision, of any weight. Our condition *now* is very different from theirs *at that time*, individually and socially; so that there is no propriety in arguing from one to the other.

These thoughts on *productive labour* may seem to many like a long digression, Mr. Editor, but it appears to *me* otherwise; and the course of remarks was intended with a principal reference to this subject. But there is one more point to be considered still.

One of the strongest reasons why a teacher should join in the sports of his pupils is, that he may not only turn them to their physical and intellectual advantage, but that he may *moralize* them.—There is no place where a teacher may better study the characters of his pupils than in the play ground, the gymnasium, the field and the garden. Here they seldom act a borrowed part; they are more nearly what they seem to be. By his example, by his looks, by his words,—by *other* means,—should these become necessary, may he mould their characters more truly, more thoroughly, more permanently, than by any, or even, as I was going to say, by all other means put together.

It is often said that an instructor may get along in this manner for the time, but those pupils who have been accustomed to regard the teacher as an equal at school, can never in after life, entertain a proper respect for him; and will be unavoidably compelled to look upon him as a mere companion. But facts speak quite a different language; and on the contrary I am fully convinced, that *children can never entertain a PROPER respect for any person whom they have not first regarded as a friend.*

There are some minor reasons why teachers ought to join in the sports of their pupils. One is, it blends childhood with maturity, and probably improves the character—possibly the health of both parties; but especially of the teacher. Again it brings the teacher on the spot, and renders him an eyewitness to many little scenes for a knowledge of which, if it were *deemed indispensable*, he would

otherwise often be compelled to depend on interested, prejudiced, sometimes malicious informers.

But I have no time to enlarge. If these brief hints on a subject which, in my view, ranks among the first in point of importance, should be worthy of a place in the "Annals," whose columns I understand are open to different views on instruction and education, you are at liberty, Mr. Editor, to insert them, or any part of them.

Yours truly,

A COMMON-SCHOOL TEACHER.

PATERNAL ADVICE.

The following extract from a letter written by Colonel Stedman, well known to the reader by his narrative of the Expedition against the revolted negroes of Surinam, presents in a small compass, an excellent code for the promotion of happiness and health. It was addressed to his son a short time before the writer's decease.

As the last good I can do for you in this world, my dear John, I who ever loved you so tenderly, now join to the trifles I leave you, these few lines. Above all things fear God, as the Supreme Author of all good; love him in your soul, and be religious; but detest every tincture of hypocrisy.

Regard your neighbour, that is, all mankind, and of whatever nation, profession, or faith, while they are honest, and be ever so thyself—it is the best policy in the end, depend upon it.

Guard against idleness—it is the root of every misery, to which bad company gives the finishing stroke. Love economy without avarice or meanness, and be ever thyself thy best friend.

Fly from debauchery and all excesses; they will destroy thy body, while they are a constant canker to thy mind. To keep both sound, my dear child, be never behindhand with thy correspondent, with thy creditor, with thy daily occupations, or with thy conscience; thus shalt thou enjoy peace. By using pure air, exercise, proper diet and recreation, thy body shall possess health and vigour.

Dear John, should fortune frown, which depend upon it, sometimes she will, then look around on thousands more wretched than thyself, and who perhaps, did less deserve to be so, and be content. Contentment, believe me, is better than fine gold.

Wish not for death, it is a sin; but scorn to fear it, and be prepared to meet it every hour, since come it must; while the good mind smiles at its sting, and defies its point, the evil by dreading it fall more readily its prey.

Beware of passion and cruelty; but rejoice in being good natured, and humane not only to man, but to the meanest brute, that is, the whole sentient creation without exception. Detest to hurt any animal excepting for thy food or thy defence. To be cruel is the portion of the coward, while bravery and humanity go hand in hand.

ROBBERS CREATED BY DRUNKENNESS.

In 1752 the celebrated Henry Fielding, at that time one of his Majesty's Justices of the Peace for the county of Middlesex, in which county the city of London is situated, published an Enquiry into the causes of the increase of Robbers, with proposals for remedying this evil. In this Enquiry he refers the increase of robbery *first*, To the too frequent and expensive diversions among the poorer classes of the community: *secondly*, to drunkenness: *thirdly*, to gaming; and *finally* to the want of a due provision for the education and relief of the poor, in habits of industry. We shall merely quote what he says in reference to the second head. His observations, let it be recollected, were made upwards of eighty years ago, long before Temperance Societies were even thought of.

The second cause of the increase of robberies is *drunkenness*: "an odious vice," remarks the author of the Enquiry, "and a parent to all others; to which the English were strangers, till the Danes introduced it amongst them. But it was arrived to such a height in the reign of king James the I., that it was enacted, that every person convicted of drunkenness, so as to stagger and reel to and fro, and where the same legs that carried him into a house, cannot carry him out again, should pay *five shillings* for every offence; or, in default of distress, be committed to the stocks for *six hours*: and in case of a second offence, that he shall be bound to his good behaviour, with two sureties, in a recognizance of *ten pounds*. And our laws in order to remove the temptation, and, in a great measure to take away from the people their very power of offending this way, have, by several statutes, confined the scenes of these disorders to the rest, refreshment, and conveniences of travellers. And from a review of these laws it will be found, that the blame of the present growth of this vice lies on the remissness with which these wholesome provisions have been executed. But as a new kind of drunkenness, unknown to our ancestors, is lately sprung up amongst us, and which if not put a stop to, will infallibly destroy a great part of the inferior people; so it requires a new law to suppress it; which is that drunkenness acquired by the strongest intoxicating liquors, and particularly by that poison called *Gin*: and which I have great reason to think, is the principal sustenance, if it may be so called, of more than one hundred thousand people in this metropolis: many of these wretches swallowing pints of this poison within the twenty-four hours. Nor will any thing less than deletion serve on the present occasion, in order to preserve the morals, the innocence, the health, strength and lives of a great and most useful part of the people."

FRUGALITY.

Frugality is so necessary to the happiness of the world—so beneficial, in its various forms, to every rank of men from the highest even to the lowest—and the miseries physical and mental which the neglect of it produces, are so numerous and so grievous—that it cannot be too often, or too forcibly recommended.

Frugality may be termed the daughter of prudence, the sister of temperance, and the parent of comfort, of liberty and of health.—He that is extravagant will quickly become deprived not only of the comforts but of the necessities of life; and this deprivation will enforce dependence, and invite misery, corruption and disease. If penury be not generally dreaded as an enemy to virtue and health, yet mankind seem unanimous enough in abhorring it, as destructive to comfort and inimical to happiness: and all, to whom abject poverty is terrible, ought to consider themselves obliged to learn and practice the sage maxims of our ancestors, and thus attain to the salutary art of abridging their expenses; for, without frugality none can be independent; with it, few, very few, would be in want.

The prospect of penury and of its consequent deprivations in old age, is so gloomy and terrifying, that every man, who looks before him, must resolve to avoid it: and it may be avoided, generally, by the practice of frugality. The bulk of mankind must owe their possession of a cheerful competence in the decline of life to small and gradual profits, below which, their expenses must be resolutely reduced.

The position of “a penny saved is two pence gained,” though ridiculed by the inconsiderate and the careless, is replete with wisdom, and deserves the serious consideration of mankind, from the statesman to the apprentice. It may be accommodated to all conditions, by observing that not only they who pursue any lucrative employment, will save time, when they forbear unnecessary expense, and that this time may be employed in such relaxation as is calculated to increase the energies of their bodies and their minds, and thus render them better fitted for the continued pursuit of profit; but that every one will find, by each victory he obtains over appetite or vanity, those two greatest enemies to frugality, new strength added to his resolution, so that he will gain the power of entirely refusing the solicitations by which the young and vivacious are hourly assailed, and thus place himself beyond the reach of extravagance and folly.

It may, perhaps, be enquired by those who are willing to cavil rather than to learn and profit, what is the just measure of frugality; and when does expenditure degenerate into profusion? To these questions no general answer can be returned: since the liberty of spending, or necessity of extreme frugality may be varied without end, by the different circumstances of individuals. It may, however, be laid down as a rule never to be broken, that a man's voluntary expenses, when added to those which are indispensable, should not cause his out-lay to exceed his income. This is a maxim

so obvious and incontrovertable, that the law ranks the prodigal with the madman, and debars them equally from the conduct of their own affairs. Another precept arising out of the former, and indeed included in it, is yet necessary to be distinctly impressed upon every ardent and confident mind—Let no man anticipate uncertain profits. Let no man presume to spend upon hopes, or trust his own abilities for means of deliverance from penury, by giving loose to his present desires, and leave the reckoning to fortune or to chance.

JOURNAL OF HEALTH AND RECREATION.

PHILADELPHIA, FEBRUARY, 1833.

The interest ever inspired by the name of Egypt, will, we are persuaded, insure an attentive perusal to our initial article on the *Medical Geography* of that country. We have compiled it from authentic and esteemed sources. The prospect of a regeneration of Egypt at this present time, and the imposing attitude which her ruler Mehemet Ali assumes to the Porte or government at Constantinople, will have excited increased curiosity in our readers to become still better acquainted with the physical character and climate of the country. As expressive of the early power of Egypt, and the vastness of her resources, and the stupendous magnitude of her works of art, we cannot forbear introducing the words of a late and learned writer on the subject.

“The land of the Pharaohs in truth, was an old country in the infant age of Greece. The earliest writers of Europe described its grandeur as having already reached its consummation, and even as beginning to pass away, while the philosophers and historians who crossed the Mediterranean in search of knowledge, were astonished at the proofs of an antiquity which surpassed all their notions of recorded time, and at the tokens of a wisdom, genius and opulence, of which they could hardly hope that their countrymen would believe the description. In the days of Homer, the capital of the Thebaid, with its hundred gates and its vast population, was a subject of wonder and of the most exalted panegyric, an effort which we should at once attribute to the exaggeration of the poet, were it not that the remains, which, even after the lapse of three thousand years, continuing to resist the injuries of the atmosphere and of barbarism, bear evidence to a still greater magnificence than is recorded in the pages of the *Odyssey*. While the nations which at present make the greatest figure in the world, and influence most deeply the condition of human nature, had not yet passed through the first stage of social life, the inhabitants of Thebes and Memphis had made a vast progress in civilization, and were even found gra-

tifying a learned curiosity by inquiries into the constitution of the universe, and into the laws which regulate the movements of the heavenly bodies. Nor was it only the learning and mythological doctrines which characterised the brightest periods of Greece and Rome that were borrowed from the Egyptians. On the contrary, we can trace to the same source those more valuable sciences which exercised the talents of the most ancient and renowned among European sages. Pythagorus submitted to study the elements of mathematics in the school of the priests; while Hecataeus and Herodotus collected the materials of history among the same class of men, who had carefully preserved the knowledge of former generations." *Ancient and Modern Egypt*—By Rev. Michael Russell, L. L. D.

The article on the Sports of Children, is from the January number of the "*American Annals of Education and Instruction*," a work from which we have, in former volumes, so freely and profitably borrowed. The editor, Mr. Wm. C. Woodbridge, brings to the discharge of his duties great knowledge, obtained by study, observation and travel, and quickened into advantageous display by the most untiring zeal. The *Annals* are published monthly in numbers of 48 pages 8vo., at the moderate price of \$3 50 per annum.

THE UNITED STATES DISPENSATORY.

It gives us great pleasure to be able to direct the attention of physicians, chemists and apothecaries to a work alike valuable and interesting to them and creditable to its authors. We speak of *The Dispensatory of the United States of America*. By George B. Wood, M. D. and Franklin Bache, M. D.

It is more than is held forth on the title page, being not only an American production but one also of a high order, which displays throughout evidences of patient and laborious investigation and judicious arrangement. It would indeed, we believe, be difficult to find two gentlemen better fitted for the task than Drs. Wood and Bache. The former is Professor of Materia Medica and Pharmacy, and the latter Professor of Chemistry in the Philadelphia College of Pharmacy. Both of them have long devoted a large portion of the time which could be abstracted from the routine of strictly professional duties, to a consideration of the subjects embraced within the scope of a dispensatory. We can say also from our own knowledge, that rarely have we met with more patient observers and experimenters, who at the same time are conscientiously alive to accuracy of result and fidelity of report than Drs.

Wood and Bache. However strong this language may seem to our readers, we believe that in uttering it we divest ourselves of personal predilections, and speak of those gentlemen simply in reference to their qualifications as authors, and of their book as a contribution to *Materia Medica* and Pharmacy of which the country may be justly proud. Nor is it to be supposed that our eulogy shall engage our entire assent to all the inferences and opinions of the authors. Critics can seldom promise so completely to give in their adhesion. But we are justified when a work has distinguishing and undoubted merits, such as the present unquestionably exhibits in almost every page, to recommend it as we now do to the professional classes for whom it was written—and to whom its possession will prove of the greatest use—we were about to say indispensable necessity. Before we conclude, however, we shall show that the introduction of the subject here, will not be without advantage to the general reader to whom in this *Journal* we mainly address ourselves.

In the article on Water, (*Aqua* in the Dispensatory,) the authors make the following remarks—

“Water is a substance of the first necessity to living beings, whether vegetable or animal. In animals there exists an instinctive desire for it, to repair the waste of the fluids which is constantly taking place from the animal economy. It constitutes the basis of nearly all the secretions, and nine-tenths of the weight of the blood. In short, it is nature’s instrument for producing the liquid state; and it is the only diluent proper in a state of health.”

Touching ‘*Alcohol*,’ we find them after some observations on its medicinal use when diluted, properly add—

“Physicians ought to be on their guard not to prescribe alcoholic remedies in chronic diseases, whether alone or in the form of tinctures, for fear of begetting habits of intemperance in their patients.”

This is an iteration of the advice long ago given and warmly urged by the late Dr. Rush—as we took occasion to mention in our biographical sketch of that distinguished man.

On the score of the habitual use of alcoholic liquors—we have the following clear language from the authors of the Dispensatory:

“As an article of daily and dietetic use, alcoholic liquors produce the most deplorable consequences. Besides the moral degradation which they cause, their habitual use gives rise to dyspepsia, hypochondriasis, visceral obstructions, dropsy, paralysis, and not unfrequently mania.”

Under the head Wine, (*Vinum* in the Dispensatory,) we read:

“Wine is consumed in most civilized countries as an article of daily beverage; but in a state of health it is at least useless if not

absolutely pernicious. The degree of mischief which it produces, depends very much on the character of the wine. Thus the light wines of France are comparatively innocuous; while the habitual use of the stronger ones, such as port, maderia, sherry, &c., even though taken in moderation, is always injurious, as having a tendency to induce gout and apoplexy, and other diseases dependent on plethora and over-stimulation. All wines, however, when use habitually in excess, are productive of the worst consequences. They weaken the stomach, produce diseases of the liver, and give rise to dropsy, gout, apoplexy, tremors and not unfrequently mania."

Then follow details respecting the medicinal use of wine.

Prince Puckler Muskau, the German Tourist, from whose lively and graphic descriptions of English Society we have already made extracts, is still more happy in his characteristics of Ireland and Irishmen. With evident admiration of the Irish character, he became, however, immediately sensible of its foibles, and the chief causes which cast a shadow over its brightness. The following account of Donnabrook Fair, is to the life.

"I rode out again to-day for the first time, to see the fair at Donnabrook, near Dublin, which is a kind of popular festival.— Nothing indeed can be more national! The poverty, the dirt, and the wild tumult were as great as the glee and merriment with which the cheapest pleasures were enjoyed. I saw things eaten and drunken with delight, which forced me to turn my head quickly away to remain master of my disgust. Heat and dust, crowd and stench, ('il faut le dire,') made it impossible to stay long: but these do not annoy the natives. There were many hundred tents, all ragged like the people, and adorned with tawdry rags instead of flags; many contented themselves with a cross on a hoop; one had hoisted a dead and half putrid cat as a sign! The lowest sort of rope-dancers and posture-masters exercised their toilsome vocation on stages of planks, and dressed in shabby finery, dancing and grimacing in the dreadful heat till they were completely exhausted. A third part of the public lay, or rather reeled, about, drunk; others ate, screamed, shouted and fought. The women rode about, sitting two and three upon an ass, pushed their way through the crowd, smoked with great delight, and coquetted with their sweethearts. The most ridiculous group was one which I should have thought indigenous only to Rio de la Plata: two beggars were seated on a horse, who by his wretched plight seemed to supplicate for them; they had no saddle, and a piece of twine served as reins.

"As I left the fair, a pair of lovers, excessively drunk, took the same road. It was a rich treat to watch their behaviour. Both were horribly ugly, but treated each other with the greatest tenderness, and the most delicate attention. The lover especially displayed a sort of chivalrous politeness. Nothing could be more

gallant, and at the same time more respectful, than his repeated efforts to preserve his fair one from falling, although he had no little difficulty in keeping his own balance. From his ingratiating demeanour and her delighted smiles, I could also perceive that he was using every endeavour to entertain her agreeably; and that her answers, notwithstanding her 'exalte' state, were given with a coquetry and an air of affectionate intimacy which would have been exquisitely becoming and attractive in a pretty woman.

"My reverence for truth compels me to add that not the slightest trace of English brutality was to be perceived: they were more like French people, though their gaiety was mingled with more humour, and more genuine good-nature; both of which are national traits of the Irish, and are always doubled by Potheen (the best sort of whiskey illicitly distilled.)

"Don't reproach me for the vulgarity of the pictures I send you; they are more akin to nature than the painted dolls of our 'salons.'"

His impressions at the sight of the Dublin populace, are thus given:

"The dirt, the poverty, and the ragged clothing of the common people often exceeded all belief. Nevertheless they seem always good-natured, and sometimes have fits of merriment in the open streets which border on madness;—whiskey is generally at the bottom of this. I saw a half-naked lad dance the national dance in the market-place so long, and with such violent exertion, that at last he fell down senseless amid the cheers of the spectators, totally exhausted, like a Mohammedan dervise.

"The streets are crowded with beggar-boys, who buzz around one like flies, incessantly offering their services. Notwithstanding their extreme poverty, you may trust implicitly to their honesty; and wretched, lean, and famished as they appear, you see no traces of melancholy in their open, good-natured countenances. They are the best-bred and most contented beggar-boys in the world. Such a little fellow will run by your horse's side for hours, hold it when you alight, go on any errand you like; and is not only contented with the few pence you give him, but full of gratitude, which he expresses with Irish hyperbole. The Irishman appears generally more patient than his neighbours, but somewhat degraded by long slavery."

The portrait of Lady Morgan is hit off in a few masterly touches:

"I declined staying to dinner, and hastened back to town to call on Lady M——, to whom I had a letter of introduction, and who had already sent me a polite invitation which I had not been able to accept. I was very eager to make the acquaintance of a woman whom I rate so highly as an authoress. I found her, however, very different from what I had pictured her to myself. She is a little frivolous lively woman, apparently between thirty and forty, neither pretty nor ugly, but by no means disposed to resign

all claim to the former, and with really fine and expressive eyes. She has no idea of 'mauvaise honte' or embarrassment; her manners are not the most refined, and affect the 'aisance' and levity of the fashionable world, which, however, do not sit calmly or naturally upon her. She has the English weakness,—that of talking incessantly of fashionable acquaintances, and trying to pass for very 'recherehe,' to a degree quite unworthy of a woman of such distinguished talents; she is not at all aware how she thus under-rates herself.

"She is not difficult to know, for with more vivacity than good taste, she instantly professes perfect openness, and especially sets forth on every occasion her liberalism and her infidelity; the latter of the somewhat obsolete school of Helvetius and Condillac. In her writings she is far more guarded and dignified than in her conversation. The satire of the latter is, however, not less biting and dexterous than that of her pen, and just as little remarkable for a conscientious regard to truth. You may think that with all these elements two hours flew rapidly away. I had enthusiasm enough to be able to utter some 'a propos' which pleased her, and she treated me with marked attention: first, because I happen to have a distinguished title; and secondly, because she had seen my name as dancing at Almacks, and as present at several 'fetes' of the great leaders of Ton—a circumstance which appeared so important in her eyes, that she repeatedly recurred to it."

Feeding on Smells.—The odorous effluvia emitted from aliments were considered anciently to possess nutritive properties. This arose probably in a great measure from the well known effects produced by savory and disgusting odours upon the appetite. It is impossible than a sufficiency of the matter given off in the form of effluvia, even admitting this to be nutritive, can be absorbed in the system, to account for the apparent satiety induced by the smell of certain viands. The fact can only be explained by the effect produced upon the nervous system—impressions upon which influence very powerfully the appetite, as we see daily exemplified in the operation of various mental emotions. The very first perception of a nauseous or disagreeable odour, or even of one, otherwise agreeable, when the stomach is labouring under certain states of derangement, will frequently quell in an instant the keenest appetite, or convert it into loathing. The ancients nevertheless believed that life might be sustained for some time by simply smelling nutritious substances. Democritus is said to have lived three days on the vapour of hot bread; and Bacon refers to a man, who supported an abstinence of several days by inhaling the odour of a mixture of aromatic and alliaceous herbs. Two hundred years ago these notions were entertained to a great extent, and they afforded the basis for the viaticum, suggested for travellers proceeding to the moon, according to the plan proposed by Dr. John Wilkins, bishop of Chester. This learned prelate published a work in 1638, entitled

"*The discovery of a New World, or a discourse tending to prove there may be another habitable world in the moon, with a discourse concerning the probability of a passage thither.*" In which he remarks: "If we must needs feed upon something, why may not smells nourish us? Plutarch and Pliny, and divers other ancients, tell us of a nation in India, that lived only upon pleasing odours, and it is the common opinion of physicians, that these do strangely both strengthen and repair the spirits."

All our readers have heard of or read Mrs. Trollope's book of Travels in America. It is amusing by the broad caricature vein in which she indulges; and it is moreover well written. Her novel termed "*The Refugee in America*," has much less to attract in it than her Travels—it is a laboured production, neither creditable to her intellect nor her feelings. We in this country ought not, however, to be very wroth at the classification which she has thought proper to make of characters in the novel. The dissolute and fraudulent gamester in London, afterwards supposed to become a clergyman in the state of New York, the hypocritical and mendacious lawyer, and his immediate agent the vulgar and blood thirsty villain of a smuggler and robber, who figure conspicuously in the work, are all English. Selfishness, quaintness of expression, and misconception of the transcendent merits of every John Bull who lands on our shores, are adduced as characteristic traits of the Americans. We shall convey a better idea to our readers of the *accuracy* and *candour* of this new sketcher of our social forms and usages, by an extract, than by any criticisms of our own. Miss Caroline Gordon and her father accompanied to the United States young Lord Darcy, who it was thought even by himself, had killed a man in a personal rencounter on the sea shore; and who was immediately after taken off to an American ship by Mr. Gordon. The following scene is intended to illustrate the nature of an American party: it is at Rochester, N. York.

"Immediately upon her being seated, Mrs. Williams came to her, and making a solemn courtesy, said, 'How do you do ma'am, I hope I see you well?'"

"This being spoken and replied to, the lady retired. Emily contrived to hover near her for a little while, but was called away by her mother's saying, 'I expect Anastasia wants you, Emily Williams.'

"Thus left to herself, Caroline looked round the room; not an eye but was fixed upon her, and the little conversation which was going on among the ladies, consisted in a cautious whisper between neighbours, of which it was but too easy to perceive that she was the subject.

"It was impossible to bear this long. Mr. Warner had approached to pay his compliments to her, and when he was again about to retreat to the group of standing gentlemen, she stopped him by saying, 'Will you give me your arm across the room, Mr. Warner?' and before he well understood her purpose, she rose, and passed her arm within his. This action seemed to dissolve the spell which had fallen upon the female tongues; but among the few phrases that reached her, still fewer were intelligible, which, considering the spirit that appeared to pervade them, was not much to be regretted.

"'Lock and lock, I declare! thank the praise, I was born in America; now shou'dn't you be right down consternated, if you saw Benjamin do a that?'

"'I cannot realize how any girl can get upon such a lay, and yet keep her standing.'

"'If I live from July to eternity, I shall never oblivate that go.'

"'How she swiggles her way through the gentlemen! Did you ever see?'

"'My! It's musical enough to be sure, just to watch her ways.'

"While these sharp darts flew lightly past her, on their foreign idiom, Miss Gordon continued her adventurous progress to the place which Madame de Clairville occupied at the farther end of the long apartment.

"Madame de Clairville was not a great person at Rochester. The ladies had discovered that she had but two visiting gowns in the world. She was invited to the parties, because she was 'one of the ladies at Mrs. Bevan's,' but as no one ever saw even a new riband about her since the day of her arrival, now nearly six months ago; as she spoke English with difficulty, and generally smiled in the wrong place when she was spoken to; as she belonged to no congregation, and never gave tea, she was considered a little nobody."

"Emily acquitted herself so well in repeating this answer, that a movement was immediately perceptible towards the piano. Madame de Clairville said it would be necessary to approach; and Mr. Gordon, giving an arm to each, they joined the party that now crowded round the instrument. A tall awkward girl, but, like almost all Americans, with a handsome face, began drawing off her gloves; they were very tight, and the operation took some time, but the moment it was complete, she sat down suddenly, and instantly began singing, without prelude or symphony, 'My beautiful Maid.'

"To describe the manner in which this was done, is impossible. The singing, the playing, the voice, the finger, the time, the style, were all much too extraordinary to be conceived from words.

"Mr. Gordon felt a slight quiver in each of the little hands that rested on his arms, but both ladies were too highly bred, to move a muscle of the face.

"When the performance was ended, the young lady sprang up as abruptly as she had sat down.

"Mr. Robert Wilson was next requested to play. The instru-

ment was a very poor one, but the moment he touched it, no doubt could remain of his power; he played with the hand of a master.

"After a rich and imaginative prelude, he sung one of Dr. Arne's beautiful songs, with a voice that might have made his fortune in any country in Europe.

"It was really a comfort to have something to praise. To the rest of the party the performance was not new, but to Mr. Gordon and Caroline it was equally unexpected and delightful. The young man received their compliments with evident satisfaction, but when asked to sing again, he said the little he could do for their amusement would be greatly improved, if his cousin Emily could be prevailed on to sing with him.

"Every one looked round for her, but she had left the room. Mrs. Williams went to the door to call her, but she did not answer, and Anastasia came forward to say, that 'Emily Williams was sick, and gone to bed.'

"Mr. Robert Wilson immediately began to sing again, as if to prevent farther inquiry; and such was the power of his exquisite performance, that he succeeded in rivetting the attention of his hearers to himself.

"Miss Gordon and Madame de Clairville seated themselves at a little distance, and would from thence have enjoyed at their ease the pleasure of listening, had not their attention been withdrawn from the singing by the whispered, but earnest conversation of two ladies who were seated next them: one of these was Miss Duncomb, and the other a stout, jovial looking woman, whose drawling, canting tone of voice offered an amusing contrast to the comfortable look of good-humour and self-indulgence which her face and person exhibited.

"I shall ever maintain, Mrs. Barnet, that, when it is in the way of our vocation that we are exposed to the snare of the fowler, we are sure to be sustained in the path.'

"'But it is a fearful peril that we run, Miss Duncomb,' drawled the fat lady, 'listening this fashion to the breath of manhood, uttering the words of love!'

"'Ah—h!' answered Miss Duncomb, with a shudder, 'it is a sin and abomination, but it is our duty, Mrs. Barnet, to follow where the righteous lead. Is he not the son of our brother?'

"'That's a fact, Miss Duncomb, and the more strange is it, that he should sit caterwauling there, just like the son of any other man. 'Tis awful, Miss Duncomb!'

"'Mrs. Barnet, I guess, ma'am, that you do not know the young man as well as I do; he is as playfully disposed as any young man I know; and were we advanced enough to missionize from this, I cannot realize that there is any one more fit to promote christianization among the heathen, and to happyfy his converts, than young Mr. Robert.'

"'I don't wish to blame your association feelings, Miss Duncomb; but to eventuate what I was going to say, I must confess that for a young man of such capacity, he ought by this to have

showed more anxiety for the welfare of the church. Dear me, Miss Duncomb, only look at Miss Martin's muslin!—isn't it as coarse as hominy?"

" 'I wish 'twas a little higher about the neck, Mrs. Barnet, and I would not fault the muslin. That young Miss would conduct better, if she thought less of her beauty.'

" 'That's a fact. I wish it would convene to Anastasia to bring the oysters this way; I feel altogether faintish.'

"The oysters and ices approached for the fourth time, and Miss Gordon hastened to take leave, but first engaged Madame de Clairville to pass the next evening with her."

The attention of many of our benevolent citizens is beginning to be directed to the subject of education of the Blind. Nothing, therefore, could be better timed than the initial article in Hazard's Register of Pennsylvania, No. 267, on the proportion of blind to the whole population in this State, and in the United States, and also the proportion in this particular among the whites and the blacks; and finally a notice of the probable cause as far as it depends on climate and locality. The estimable and intelligent editor has introduced a number of tables and estimates on the several points in which he displays his customary spirit of patient and laborious investigation. Space is not allowed us to insert these on the present occasion, but we hope that other channels will be obtained for giving extended circulation to views and statements, which cannot but serve as useful data for legislation on the subject, and for guiding the labours of the benevolent in this cause.

"It would appear, therefore," says Mr. Hazard, "that under all circumstances, the coloured population is most subject to blindness—that both in the Atlantic States and in those immediately bordering on the lakes, it is the most liable to it—and most free from it in those States remote from either of those extremes. On the other hand, in the latter States, taken aggregately, the whites are less subject to blindness than in the Atlantic States, and towards the lakes still less than between the two extremes, notwithstanding the two or three apparent exceptions, which we have noticed."

Among the large number of 'Annuals' and 'Christmas' and 'New Year's Offerings,' we have not seen any to please us more than the "*New Year's Offering*, from the New York State Temperance Society, to the Common Schools of the State:" being an extra number of the *Temperance Recorder*, published at Albany.

The Executive Committee of the New York Society are engaged in a great and glorious work, and manfully and nobly do they

carry it on. For far less services rendered to their fellow citizens, men have, before now, received pensions during their life time; and have had monuments erected to them after death. But the reward most grateful to this Committee and the Society in general is success to their efforts; and the proudest monument a sober, industrious and happy people.

The New Year's Offering contains a *Brief Account of the State of New York*, taken from the *Encyclopedia Americana*: a *Summary of the Principal Revisions contained in the Constitution of the United States*: a *Brief Summary of the Evils arising from the use of Ardent Spirits*, with a short account of the *New York State Temperance Society*, its operations and success; with an appeal to the 500,000 children of the *Common School in the State of New York*.—Interesting historical anecdotes illustrative of the happy influence of Temperance—with poetry on *Intemperance*; and in conclusion, entertaining and instructive miscellaneous matter.

The Pennsylvania State Society seems to be stirring in good earnest, and high time is it—when we look at what has been done by our sister State.

The first number was published, on the 14th inst. in this city, of a new weekly paper, the *Pennsylvania Advocate*; and *Journal of the State Temperance Society*. The line immediately following the title is expressive of the intentions of its conductors: it runs thus, “*Education, Morals, Literature, Science and the Arts—These be our Themes.*” The initial article under the editorial head may be considered as the declaration and creed of the *Advocate*. Should the hopes and promises there held forth be realized, the paper will be acceptable to all classes, and be adopted as a pleasant and instructive family companion. There is a distinct disclaimer of any intention to mingle or take a share in party politics—or sectarian discussions—at the same time that the powerful influence of religion and religious instruction is distinctly affirmed. The editorial and publishing duties of the *Advocate* are entirely distinct, and under the separate control of different persons.

MUSICAL COMPOSERS.

Francis Joseph Haydn was a native of Rohrau, a small town in Silesia, where he was born in March, 1732. His father was a wheel-wright; and his early years were chequered by various fortunes, which did not, however, damp the ardour of his genius, or sully the lustre of his fame. He was equally distinguished as a composer of secular and ecclesiastical music; and his oratorios are

well known in this country and England, where they are deservedly popular: selections from *The Seasons* and *The Creation* (and occasionally those two oratorios entire) being performed at our festivals, as often, nearly, as those of Handel himself. Haydn was an enthusiastic admirer of that composer, whose music he heard in London, terming him the father of modern musicians. If he had never admired Handel, most probably he would never have composed *The Creation*: his genius and his love of eminence appearing to have been excited by the example of that master. Great, however, as his vocal efforts are, it is his symphonies which have most contributed to exalt his fame. They are characterized by simplicity, vivacity, and a most felicitous use of the instruments. His style in this department of musical composition possesses a graceful melody; an inexhaustible fertility of ideas; a harmony pure and powerful, increasing in fulness as he increased in years; and a modulation rich and varied, and differing from that of his predecessors by its novelty, as much as it surpassed all former efforts by its judicious adaptation. Haydn died on the 26th of May, 1810.

Wolfgang Amadeus Mozart was born on the 27th of January, 1756. His precocious talents were most remarkable; for he was capable of playing difficult compositions before he was six years old; and, at that early age, had a facility of improvisating at the instrument truly remarkable. His early conceptions of harmonic combinations were also wonderful. He dotted down some of his thoughts when a child, which he shewed to his father, who was delighted with them; they were, however, too difficult for him to perform. He made an itinerary through Germany, with his father and sister, to Paris and London, before he was eight years old, performing at all the courts of the different states he passed through, and before the principal nobility and gentry. The family party arrived in England, in April, 1764, and remained here till the following year. During their stay, the father of Mozart was taken dangerously ill of a sore throat; and whilst he was confined to the house, his son, then little more than eight years of age, wrote his first *sinfonia*. It was scored with all the instruments, not omitting drums and trumpets; and to his sister, who sat near him while he wrote, he remarked, "Remind me that I give the horns something good to do."

It is impossible, however, for us to follow Mozart through his professional career; which was one of the most brilliant of any modern professor, not excepting even Rossini. As a performer, and as a composer for the theatre or the church, for the voice or for instruments, he is particularly distinguished; his symphonies abound in beautiful melodies, and delightful harmonies; whilst his operas of *Idomeneo*, *La Clemenza di Tito*, *Le Nozze di Figaro*, *Giovanni*, and *Der Zauberflöte*, his *Masses* and his *Requiem*, present a variety of beauties scarcely to be met with in any other author. "He excelled in all styles, from the symphony to the dance, from operas to the most simple ballads;" and his works are eminently remarkable for the ingenuity and novelty of his arrangement of the wind instruments.

This eminent composer died in December, 1792; and it is a remarkable fact, that, "in less than forty years, so completely has every bodily trace of Mozart vanished from the minds of the people of Vienna, that there is not a soul there who can even tell the place where he was buried."

Ludwig Von Beethoven was born in the year 1770, at Baun, where his father was at that time the tenor singer in the chapel of the Elector. Neefe, the court organist, Haydn, and Albrechtsberger, were his masters; and he has reflected honour even upon their illustrious names. He was very early distinguished for his abilities as a performer,—his greatest power consisting, it appears, in extemporary performance, and in the art of varying any given theme without the least premeditation. In this he approached nearest to Mozart, and has never had a rival since; with the exception of our young contemporary, master George Aspull.

Beethoven was a most voluminous composer. He followed Haydn and Mozart in enriching and enlarging the sphere of instrumental music; and his symphonies, whilst they are strikingly original, have, some of them, an air of wild romance running through them, which is bewitchingly captivating. According to the Editor of the *Quarterly Musical Review*, "his peculiar beauties may be enumerated as follows:—originality of invention, uncommon passages, a very energetic manner, imitative passages almost innumerable, and abstruse scientific modulation." For some years before his death, Beethoven was afflicted with an incurable deafness; a melancholy fate for one, with a mind so ardent, to be subjected to; and which operated upon his physical temperament, but had no effect upon his talents. He died on the 26th of March, 1827, at Vienna, under circumstances of pecuniary embarrassment, which had obliged him, a short time before, to make an appeal, that was promptly answered, to the bounty of the professors in this country.

BILLS OF MORTALITY FOR THE YEAR 1832.

Deaths in Philadelphia in the year 1832.—It appears from the official report of the Board of Health of Philadelphia, that the deaths in the city and liberties from the 1st January 1832 to the 1st January 1833, amounted to six thousand six hundred and ninety-nine, (6699)—Of these there were under one year 1521, from one to two years 643, from two to five years 689, from five to ten years 336, from ten to fifteen years 118, from fifteen to twenty years 142, from twenty to thirty years 791, from thirty to forty years 836, from forty to fifty years 599, from fifty to sixty years 375, from sixty to seventy years 285, from seventy to eighty years 218, from eighty to ninety years 111, from ninety to one hundred years 28, from one hundred to one hundred and ten 6, from one hundred and ten to one hundred and twenty 1. Total 6,699.

Of the above there were Males of 20 years and upwards, 1,835; under 20 years, 1,871; 1,415 Females of 20 years and upwards, and 1,578 under 20 years.

There were 590 returns received at the Health Office, of persons who died in the Alms-House in the City, and 45 in the Alms-House at Blockley, during the year; 706 People of Color are included in the total number of deaths.

Agreeable to returns made at the Health Office, and collected from 162 Practitioners of Midwifery, there have been born in the city and liberties, from the 1st of January, 1832, to the 1st of January, 1833, 3,834 Male, and 3,419 Female Children; making the total number of births 7,253, leaving a difference between the births and deaths in favour of the former of 554.

Deaths in each month of the above period.

January	253	361	614
February	151	324	475
March	218	298	516
April	215	257	472
May	274	299	573
June	179	211	390
July	200	365	565
August	1099	590	1689
September	215	234	449
October	194	192	386
November	130	127	257
December	136	177	313
	<hr/>	<hr/>	<hr/>
	3264	3435	6699

The chief outlets to human life during the year were as follows:— *Cholera*, (malignant) 948; *consumption*, (pulmonary) 681; *cholera infantum*, (the summer complaint of children) 366; *convulsions*, 342; *scarlet fever*, 302; *inflammation of the lungs*, 225; *mania a potu*, (madness from strong drink) 150; *inflammation of the brain*, 102; *inflammation of the bowels*, 125; *croup*, 110; *dropsy of the head*, 187; *dropsy of the breast*, 62; *cholera morbus*, 73; *small pox*, 37.

Deaths in the city of New York during the year 1832.—The sum total of deaths in New York, during the year ending December 31st, 1832, is *ten thousand three hundred and fifty-nine*, (10,359,) being *three thousand nine hundred and ninety-six* more than ever occurred in the city before in any one year.—The chief causes of death were from the following diseases: *malignant cholera*, 3,515, all in the months of July, August, September and October; *consumption*, (pulmonary) 1,415; *convulsions*, 501; *dropsy in the head*, 344; *infantile flux*, (summer complaint of children) 334; *inflammation of the lungs*, 333; *measles*, 290; *scarlet fever*, 221; *inflammation of bowels*, 196; *dysentery*, 130; *diarrhœa*, 104; *inflammation of the brain*, 99; *intemperance*, 119; *croup or hives*, 179; *apoplexy*, 81; *whooping cough*, 63; *drowned*, 66.

The number of deaths in January was 564, February 735, March 545, April 478, May 515, June 410, July 2,467,—of which by cholera 1,797, August 2,206, of which by cholera, 1,202, September 1,064,—of which by cholera 451, October 586,—of which by cholera 63, November 400; December 389. Total 10,359.

Of the age of one year or under, there died 1,922, between one and two years 830, between two and five years 965, five and ten years 450, ten and twenty 433, twenty and thirty 1,397, thirty and forty 1,617, forty and fifty 1,142, fifty and sixty 705, sixty and seventy 489, seventy and eighty 273, eighty and ninety 109, ninety and a hundred 25, over a hundred 2. Total 10,359.

It will be observed that the proportion of deaths in middle age is unusually large; the cholera having selected the greater part of its victims from that description of persons.

Of the whole number 3,200 were men, 2,694 women, 2,463 boys, and 2,092 girls. Total males 5,663, females 4,696. Excess of males 967.

Proportion of deaths to the whole population, rating it at 220,000, 1 in 21½.—In 1831, rating the population at 210,000, 1 in 34½.

The number of deaths in 1831 was 6,363; in 1830, 5,537; in 1829, 5,094, in 1828, 5,181; in 1827, the same, in 1826, 4,973.

Mortality in Boston for the year 1832.—The number of deaths during the year ending with December 1832, is 1,761. Of these there were 199 from *scarlet fever and throat distemper*; 70 from *measles*; 78 from *malignant cholera*.

“The mortality during the past year is more by 22 per cent. than that of the preceding one. The deaths for 1831 averaged 28 per week; those for 1832, 34. A part of this increase is no doubt to be attributed to the augmentation of inhabitants, which, for the year, is probably not far from 3 per cent; that is, if we suppose the ratio of increase from 1820 to 1830 to have continued unchanged. The increase of mortality, therefore, on the same number of inhabitants, is about 19 per cent. Neglecting, however, the consideration of the difference in population, for which it will not be difficult to make the allowance, we shall consider some of the most interesting points of view in which the general fact alluded to presents itself. Comparing, then, the same months in the two successive years, we find that for January there is an increase of 55 per cent.; in February, of 45; in March, of 31; in April, of 70; in May, of 101, the deaths being more than double this year; in June, of 55; in July, of 22; in September, of 24; in October, of 32; in November, of 15; while for August there appears a diminution of 13, and in December of 39. This last month, indeed, presents the greatest mortality of any during the year 1831. The mortality of this month, during that year, was probably connected with the extreme and unremitted cold, occurring as it did at an unusually early period of the season. —*Boston Medical and Surgical Intelligencer*, January 23, 1833.

A NEW WEEKLY PAPER,

UNDER THE AUSPICES OF THE

“PENNSYLVANIA TEMPERANCE SOCIETY.”

Was published on *Thursday*, the 14th inst., the first number of the *Pennsylvania Advocate; and Journal of the State Temperance Society*—a weekly paper, which shall contain a well digested summary of news, both foreign and domestic; essays and disquisitions original and selected, and pertinent facts on *Temperance, Education and Morals*, and on the progress of the *Fine and Useful Arts*; together with accounts of the proceedings and objects of the various *Societies* in this city and elsewhere for the diffusion of *Science*, and the purposes of *Charity and Philanthropy*. History, Biography and Travels shall be laid under contribution, in order to give additional instruction and amusement through the columns of the *Pennsylvania Advocate*; which it is designed to make a pleasing family paper, in conformity with the principles of good taste and sound morality.

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JOURNAL OF HEALTH.

AND
RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, MARCH, 1833.

[No. 7.]

THE USE OF DREAMS.

It was at one time a universal opinion that the dreams with which an individual was most frequently visited, were prophetic of some evil or good event that was shortly to occur to him; or at least, that "in these visions of the night" was shadowed forth to him in a species of allegory, the scenes and trials of his future life. With a more intimate acquaintance with the functions of the brain and of the human system in general, and the introduction of a more accurate system of philosophising, these ridiculous notions have in a great measure been dispelled. Among persons of education they are no longer entertained; but among the ignorant and credulous we still find more or less importance is placed upon the vagaries of the mind, in that state of partial sleep during which alone dreams can occur. That a profitable use may be made of dreams, we are perfectly willing to admit—Upon this subject there is much good sense displayed in the following extracts from the Essay of Dr. Beattie on dreaming.

When we have an uncommon dream, we ought to look—not forward with apprehension, as if it were to be the forerunner of calamity; but rather backward, to see if we can trace out its cause, and whether we may not, from such a discovery, learn something that may be profitable to us.—I dream, for example, that some of my teeth drop out. That, say the vulgar, betokens the loss of friends. No doubt if I have any friends, and should happen to outlive them, the time must come when I shall lose them. But the dream has nothing to do with either the loss or the acquisition of friends: nor does it direct any thoughts to futurity at all. I wish, rather, to know to what state of my body this dreaming may have been owing: which if I can, who knows but I may draw advantage from my dream? My teeth seemed to drop out. Perhaps

at that time my gums were affected with some painful sensation, or convulsive movement. Might not this be occasioned by too heavy a supper, or by an ill digested dinner? Let me eat lighter food, and in less quantity, for some time, and observe, whether the same vision makes a second appearance. I make the trial; and I find that my sleep is sounder, and my dreams more agreeable. This is making a right use of dreams, and in this way I am persuaded, that persons, who divest themselves of superstition and prejudice, might make important discoveries in regard to their health.

In some constitutions, certain dreams go before, or accompany, the beginnings of certain diseases. Where, for example there is any tendency to fever, we are apt to dream of performing, with great labour, some work, we know not precisely what, in which we never make any progress. This imagination will occur in sleep, even when one has no means of observing, while awake, any symptoms that could lead one to suspect one's health to be in danger; and when it does occur, may it not serve as a warning to make some change in the ordinary regimen, to eat or drink less than usual, or have recourse to some of those other methods, whereby acute distempers are prevented? In general, when one is haunted with disagreeable dreams, it may, I think, be taken as a sign, that something is wrong in the constitution, and, therefore, that temperance, fasting, or exercise may be requisite, to avert the impending evil. And these are remedies, which one may have recourse to, and in regard to which one may venture to make a few experiments, in almost any circumstances. Agreeable dreams I would take for the signs of health; and consider them, accordingly, as good, and not evil.

This theory which I have reason to think is not without foundation, may to such as acquiesce in it, prove a good antidote to those idle superstitions in the affair of dreaming, which have been too prevalent in all ages.

After hinting that dreams may be of use in the way of physical admonition; what if I should go a step further, and say, that they may be serviceable, as a means of moral improvement? I will not affirm, however, as some have done, that, by them, we may make a more accurate discovery of our temper and prevailing passions, than by observing what passes in our minds when awake. For in sleep we are very incompetent judges of ourselves, and of every thing else; and one will dream of committing crimes with little remorse, which, if awake, one could not think of without horror. But, as many of our passions are inflamed or allayed by the temperature of the body, this, I think, may be affirmed with truth, that, by attending to what passes in sleep, we may sometimes discern what passions are predominant, and so receive good hints for the regulation of them.

Intemperance of every kind, in eating or drinking, in sleep or watching, in rest or exercise, tends to make dreams disagreeable; and therefore, one end of dreaming may be to recommend temperance and moderation. For the time we employ in sleep bears a

great proportion to the whole of human life; and if there be any expedient for rendering that part of time agreeable, it is surely worth while to put it in practice. Habits of virtue and soberness, the repression of turbulent desires; and the indulgence of pious, social, and cheerful dispositions, are, for the most part, effectual in giving that lightness to the animal spirits, and that calm temperature to the blood, which promote pleasurable thoughts through the day, and sweet slumber and easy dreams by night.

As agreeable thoughts accompany good health; as violent passions, and even madness, are the effect of certain diseases; as dullness and confusion of thought, may be occasioned by a loaded stomach; and as the swallowing of much strong liquor produces a temporary madness—as our thoughts, I say, when we are awake, are so much determined by our bodily habit, it is no wonder that they should be still more liable to such influence when we are asleep.

THE PURSUIT OF KNOWLEDGE.—SIR THOMAS SMITH.

They who have paid much attention to biography, must have been frequently struck with the variety and extent of information, in the various departments of human knowledge, which are ascribed to many of the individuals whose names are distinguished on the page of history or in the annals of science. By the indolent and irresolute, the statements in this respect will often be deemed improbable, if not beyond the range of probability; while they whose total inattention to the economy of time, renders them always busily employed, in the end, though they accomplish very little, will be astonished that men, often engaged in the most active pursuits of life, should have found time for the acquisition of numerous and difficult languages, sciences and arts, to master the simplest of which would be to them the occupation of an entire life. Every man, however, has in truth, much more time for the pursuit of knowledge than the majority are perhaps aware. If at a period, when the cultivation of the mind was attended with far greater difficulty than is now the case, individuals were enabled to master all that was then to be acquired in the way of learning and of science, while, at the same time, we seldom missed them from amid the active scenes of life; surely the same, or even more, may be done now, when the road to knowledge is travelled with so much greater facility. Far be it from us to recommend that entire abandonment of every social and active duty—that wasting of midnight oil in the pursuit of knowledge which characterized most of the professed students of former years, and which, as an old writer expresses it, “caused the mind, certes, to wax, but the body to wane.” On the contrary, allowing sufficient time for the social duties of life, and for that relaxation and amusement so essential to health and comfort, enough is still left to almost every one, for the acquirement of a vast amount of useful information, whether literary or scientific. All that is required is a proper distribution of our waking hours,

giving to each object to which our attention is to be directed its appropriate portion of the day; together with the improvement of those portions of time, which are so often consumed in enervating sloth or in trifling and debasing pursuits. By this means, a man of ordinary capacity has it in his power almost to rival the admirable Crichton, so celebrated for the extent and variety of his acquired knowledge. The difficulty is not so much in the amount of labour to be performed, neither in the want of sufficient time for its performance; it is in conquering the numerous impediments arising from our indolence, our want of perseverance, our improper indulgencies, and vitiated tastes, by which every available moment of our lives is too often completely occupied.

We have been led into these remarks by the perusal of a concise but well written life of Sir Thomas Smith, Secretary of State, first to King Edward VI., and subsequently to Queen Elizabeth of England, who died in the year 1577, aged 63 years.

In summing up his character, his biographer concludes as follows:—

“Sir Thomas was of a fair sanguine complexion, and had a calm, ingenuous countenance, as appears by his picture hanging in the parlour at Hill Hall, said to have been painted by Hans Holbein: He is there represented in a round cap, and with a civilian’s gown; a great ruby ring upon his finger, with a curious seal, which ring is still preserved in his family, one of his hands supported upon a globe. Strype informs us that he was one of the best scholars of his age; a great admirer of the Platonic philosophy; a good natural philosopher and chymist; an excellent mathematician, astronomer and arithmetician; a cunning politician;* master of the Hebrew, Greek, Latin, French, Italian and English languages; a great historian, especially in the Roman history; a complete orator; well skilled in gardening, architecture, &c. And as to his virtuous accomplishments, he was a sincere protestant, exemplary for truth, and integrity, for an inviolable love for justice and uprightness, a most unchangeable faithfulness and zeal for the concerns of his Queen and his country. His life and manners were irreproachable; he was of a grave, and yet obliging behaviour; a perfect stranger to the too common practices of courts, fraud and falsehood, flattery and treachery, vice and debauchery. He was likewise of a resolute and active mind, and of universal charity and benevolence towards all mankind.”

DOMESTIC LIFE OF A ROMAN EMPEROR.

The simple Journal of the ordinary occupations of Alexander Severus, the Roman Emperor, exhibits a pleasing picture of an accomplished gentleman, and with some allowance for the difference of manners, is well deserving of imitation at the present day.

* The term *cunning*, is not used here by the honest old chronicler as a term of reproach in its modern sense of sleight—tricky—deceitful, but with its original Saxon meaning—expert, skillful, dexterous.

Alexander, we are informed rose early; the first moments of the day were consecrated to private devotion in a temple adorned with the images of those illustrious men, who by contributing to the improvement or reform of the human character, deserved the grateful reverence of posterity. But as he deemed the service of mankind the most acceptable worship of the gods, the greater part of the morning was employed in council, where he discussed public affairs and decided private concerns with a patience and discretion above his years. The dry details of business were relieved by the charms of literature—a portion of the day being always set apart for his favourite studies in poetry, history and philosophy. The works of Horace and Virgil, the republics of Plato and of Cicero formed his taste, enlarged his understanding and gave him the noblest ideas in relation to man and to government. The exercises of the body succeeded to those of the mind; and Alexander, who was tall, active and robust, surpassed most of his equals in the gymnastic practices of that period. Refreshed by the use of the bath and a slight repast, he resumed with new vigour the business of the day. Until the hour of supper, the principal meal of the Romans, he was attended by his Secretary, with whom he read and answered the numerous communications, memorials and petitions, addressed from all quarters to the master of the greater part of the then known world. His table was served with the utmost frugality and with the simplest food; and, whenever he was at liberty to consult his own inclinations, we are assured, that the company consisted only of a few select friends, men of learning and of virtue, among whom Ulpian, his prime minister, and a good man, was constantly invited. Their conversation was free, familiar and instructive; and the pauses were occasionally enlivened by the recital of some pleasing composition, which supplied the place of the dancers, comedians, and even gladiators so frequently summoned to the tables of the rich and luxuriant Romans. The dress of Alexander was plain and modest, his demeanor courteous and affable. At the proper hours his palace was open to all his subjects; but the voice of a crier was heard as in the Eleusinian mysteries, pronouncing the same salutary admonition, “Let none enter these holy walls, unless he is conscious of a pure and virtuous mind.”

Christian princes, and scholars and gentlemen, might also take a lesson of sobriety and temperance from the Roman Emperor Julian. ‘One of his most intimate friends, who had often shared the frugal simplicity of his table, has remarked, that his light and sparing diet (which was usually of the vegetable kind) left his mind and body always free and active, for the various and important business of an author, a pontiff, a magistrate, a general, and a prince.—He possessed such a flexibility of thought, and such firmness of attention, that he could employ his hand to write, his ear to listen, and his voice to dictate; and pursue at once three several trains of ideas without hesitation and without error. While his ministers reposed, the prince flew with agility from one labour to another, and, after a hasty dinner, retired into his library, till the public business which

he had appointed for the evening, summoned him to interrupt the prosecution of his studies. The supper of the emperor was still less substantial than his former meals.' 'In his campaign against the Persians, in which he was mortally wounded, the abstemious Julian marched on foot at the head of his legions, shared their fatigues, and animated their diligence. In every useful labour, the hand of Julian was prompt and strenuous, and the imperial purple was wet and dirty as the coarse garment of the meanest soldier.'

EFFECTS OF DIET ON BOARD A SHIP.

On a voyage to or from New South Wales, which generally occupies about twenty weeks, the effects of diet are well marked, and can be distinctly observed. I shall therefore, says Mr. Cameron, (whose work we have already noticed,) describe the case of a supposed individual, keeping as near the *mean* as possible. A ship is ready at Sheerness, to proceed on her voyage, and a sailor is sent down from London by the steam-boat to join her. On examination, he will be found to be a healthy man, but of a pale complexion, and a habit of body rather reduced; probably in consequence of having been some weeks on shore, without much money, and perhaps latterly but irregularly supplied with food. I shall suppose his weight to be a hundred and sixty-five pounds. He is put into a mess, and the ship sails.

The provisions on board the ship for the sailors, are found by the owners; and in general they are of a very superior quality, particularly the beef and pork, which are usually served out to the sailors on alternate days. The biscuit is commonly of a third rate quality in fineness, but perfectly good of its kind, and likely to be more wholesome than finer would be. Of these articles it is not customary to limit the men to any allowance, (at least such has been the case in the ships in which I have been) unless they show any disposition to waste them, in which case they are perhaps limited to two pounds of beef or pork, and the same quantity of biscuit, daily. They have cocoa with sugar for breakfast; pease-soup on pork days; a pudding of flour, raisins and suet, about twice a week; a gill of rum daily, and half a pint of vinegar weekly, with a due allowance of water. They have generally got tobacco, and sometimes coffee, if they choose to purchase those articles on board.—This constitutes the sailor's allowance of food on board a merchant ship; and it will be allowed, that it is liberal and good; and its effects on the health and appearance of the sailor quickly show that it is so, *for a time*.

I have kept my eye on the man under consideration every day since we sailed from Sheerness, and we have been seven weeks at sea. I find him now of a full, I might say plethoric habit. His complexion is clear and ruddy. He is active and cheerful; able and willing to do all his work. If weighed (and I have often had them weighed) he will be found to be a hundred and seventy-five pounds. Should he meet with any accident, the sore will heal

readily; if attacked with disease, there will be little difficulty in effecting his cure.

I still watch the progress of his health until we arrive at the thirteenth week of the voyage. He still seems in good health, but his complexion has become pale; the little processes of the gums which extend up between the teeth, may be observed to be pale, semi-transparent, and of a glassy appearance, as if varnished. His tongue has a pale, sodden appearance, with a light bluish tinge.—His weight will be now found to have fallen off.

In the seventeenth week he is totally altered, his spirits and appetite have failed; great loss of flesh has taken place, and he weighs less than when he came on board; his complexion is dark, tawny, or blue. His gums have receded from the teeth, but apparently by absorption rather than ulceration. His tongue is clean, but of a purple violet colour; and the fur of the tongue stands erect, with the tips of it touched with white, giving an appearance which the mind would readily compare to a piece of bright purple velvet, finely sprinkled with pearl-powder. This appearance of the tongue is peculiar and characteristic at this stage of his—disease I believe I must call it. His breathing is hurried, with a sense of sinking or oppression at the præcordia; or he has a harrassing cough; his appetite is gone; and he has a thorough dislike to any exertion. If any accident occur to him now, for instance a cut, it will not heal as before, but gape wide open, discharging a sanious fluid, sometimes clear, at others, brown or black, according to the state of the constitution. There is very little swelling of this sore, but the colour of the surrounding skin is something between that of lead and copper. Diffused abscesses will form under the cellular membrane, sloughing will commence, &c. Still no very evident symptom of scurvy is apparent, and many would say that he was in perfect health, and would persist in such an assertion. But I can assure them, from both experience and observation, that if this man is, at this stage, attacked with fever or dysentery, and to the last he is particularly predisposed, there will be very little hope for him under the ordinary treatment.

I have now arrived at the twentieth week, and almost at the end of the voyage. He is still doing his duty, although in a very different manner from that in which he did it about ten weeks before. The officers, as he expresses it, are “hard” on him, because he will not be more active; and he says that he is not able, though he cannot exactly tell why. Much discontent arises on both sides, and both parties are glad that the harbour is in sight, where they anticipate a release from their present troubles. But before going into harbour, we shall again examine the man. All his former symptoms are now increased, his gums are livid and ulcerated, exposing the crevices of the teeth; bleed frequently and freely on the slightest touch. His fauces are swelled, with aphthous ulceration; his breath is fetid; digestion gone; he is weak, much reduced in flesh, and dejected. He has got pains all over, spots of various colours and sizes appear at the roots of the hair, being most appa-

rent if the weather be cold; his whole skin is of a leaden or livid colour; and if we were not near the harbour, where he will be able to obtain a different diet, particularly vegetables, of which he has been so long deprived; the disease would now proceed most rapidly; and he would soon have scurvy in the most aggravated form. But we get into harbour; his diet changes to fresh beef and vegetables, in lieu of salt beef and pork; and in less than ten days, he is as well, if not better, than when he came on board at Sheerness.

In fact, this is no fanciful case; it is only what I have seen a hundred times, and what takes place generally among the crew of a ship on a long voyage; and any person may see it distinctly, on any long voyage, *if they will*. Some cases are, no doubt, less prominent and marked, than this I have stated; but on the other hand, some are much more severe towards the end of every long voyage. About the eighteenth week of a voyage, the scorbutic diathesis will be strongly delineated in the countenance of every seaman on board. The rapid progress which the disease makes after spots on the skin, loss of appetite, or rigidity of any of the muscles, have taken place, is a subject of the greatest importance to be aware of, for there is no time to be lost. Neither is any time to be lost, should any other disease supervene previous to this stage; for during the continuance of any other malady, the scorbutic symptoms are rapidly evolved and brought into action.

WARMING APARTMENTS.

We are pleased to find that the means for producing and keeping up a sufficient and uniform temperature in our apartments during the winter season, is beginning to attract the attention not merely of scientific men, but of the public generally.

In our climate, the art of heating rooms is one of immense importance, as well in reference to economy and comfort as to the preservation of health. The ordinary plan of open fire places, grates, or stoves, experience has shown to be, in many points of view, in the highest degree objectionable. The only mode, perhaps, in which a proper degree of warmth can be produced, and at the same time equally diffused over a large apartment, without interfering with due ventilation, is by the admission into the room of a constant current of heated air, from a suitable furnace placed in the basement story or cellar of the building. The advantages of this plan we have on more than one occasion pointed out, and we have reason to believe that we have been in some degree instrumental in causing it to be adopted in many private dwellings in this city. Our attention has been again called to the subject by a very excellent paper on the economy of fuel, in a late number of the *Journal of Science and Arts*, from the pen of W. R. Johnson, Professor of Mechanics and Natural Philosophy in the Franklin Institute of this city.

How many of the long catalogue of diseases incident to our citizens, the Professor observes, may be traced to the unequal and

ever variable temperatures to which the mode of heating houses now exposes them? Even admitting that a uniform temperature has been obtained in the room chiefly occupied by the family, yet we seldom find the same heat prevalent throughout the house. The entries, stair-cases, and other passages are in cold weather exposed to frequent currents of an icy chillness, even while the parlor suffers the torrid influences of a roasting fire. The current up the chimney created by the latter only serves indeed to increase the severity of the cold in the halls and passages by requiring a constant supply of fresh air from without. To pass from the parlor into the open air, seldom occasions much sensible inconvenience, because the person is suitably prepared by supernumerary garments, hats, bonnets and hoods, coats, cloaks and belts, gloves, mitts and overshoes—to encounter the frosty rigor of the winter. But when we merely pass from the parlor to the “hall,” or through the stair-case to a chamber, we scarcely think of a similar precaution, and consequently encounter a fearful hazard, by exposing ourselves to the opposite extremes of summer and winter temperatures without the slightest change of apparel. Nor are these exposures always of short duration. They not unfrequently extend to a length of time, during which no prudent person would venture to remain in the *open air*, at the same temperature, as the entry in which we stand; perhaps conversing—or giving directions—or reciprocating compliments, or paying *cold* civilities.

In the customary mode of heating our apartments, but little if any attention is paid to ensure an ample supply of wholesome air. The latter requisite, remarks the Professor, is too often sacrificed to the mere elevation of temperature. Not only is the composition of the air allowed to be deteriorated by frequent respiration, but its hygrometric state is sometimes such as to operate most injuriously on the system. Nature is, in general, careful to supply our lungs, with air capable of receiving from them some portion of moisture; if this portion be either too great or too small, the lungs, and eventually the whole body, will suffer either from the excess or the deficiency. To regulate this quantity is one part of our own duty.

The true purpose of heating apartments is not merely to allow the occupants to derive heat from a *direct exposure* to fire, much less from a *contact* with the source of heat. It is to supply in winter that equable temperature to our persons which nature has provided in summer. The means, too, of communicating it, ought to be similar, and that is, chiefly, through the warming influence of the air in which we move, and by the respiration of which the due temperature of the vital organs is maintained. Although these truths are almost too obvious to require to be seriously urged in argument, yet such is the force of habit, as to render most persons insensible to the justness of this distinction; and to induce a supposition that *actual exposure to fire* is the only means of maintaining a comfortable condition of body, and a cheerful state of mind. But, do we ever sigh for the spectacle of a glowing fire in the days of July, or the evenings of August? Do we, at *that* season, contend

that the parlor is void of social attraction, because it has no *brilliant grate*, or the breakfast room cheerless, because no "blazing hearth" is seen to greet our entrance? And *why* do we *not* shiver at the sight of a drawing room without its fire in *summer*, as well as in *winter*? Obviously, because the idea of discomfort is *then* in no way connected with the absence of firelight. And the same would be true of our apartments in winter, were we equally accustomed to be free from pain, and equally sure of beholding cheerful countenances around us, while removed from a sight of the *process of combustion*. So strong a prepossession has taken hold of many minds on this subject, that mere reasoning would probably not convince one in ten, that he would be able to endure a winter's evening without a sight of the fire. But I have seldom seen an individual, who, when present in a room, otherwise heated, did not actually soon forget his *artificial want*, and become not merely reconciled to the deprivation of a glowing fire, but actually delighted with the summer-like influence which prevailed around him.

But aside from the mere condition of temperature and from its variableness, when governed by the action of *fire within the apartment to be heated*, there is, in the very pleasure which we fancy to be found only in the sight of a fire, not unfrequently, an intermixture of pain and peril, sufficient, one would suppose, to counterbalance all the good proposed by that peculiar arrangement of things. The eye is often pained and sometimes actually injured by the continued glare to which it is exposed. Resort is then had to screens or other defences to shield us from the blasting "excess of light" on which it has been our *pleasure* to fix our gaze.

Again, the radiation of heat, at first grateful, is by degrees increased until not only the face but the whole person is found in a glow far beyond what the system can safely endure. But the retreat which at length becomes necessary is not always made until profuse perspiration has been induced, and then we remove to a distance at which the radiation is almost unfelt, and where its effect on the air of the room has been wholly neutralized, by the currents from doors, windows, and other apertures. Thus is the body kept in a manner oscillating between extremes of temperature, until a confirmed "*cold*" or catarrh has taken possession of the system.

That pulmonary complaints should ensue, is but the natural consequence of this artificial variableness of climate, to which we are frequently exposed, and such a consummation has, it is believed, often been brought about by the very prudent caution of *keeping near a good fire* for a single evening.

It were needless to enumerate the dangers to which the inmates of a house, and even the house itself, are exposed where young children have free access to an open fire. The many appalling accidents which are annually recorded as resulting from this cause, are sufficient to make us desire some more secure method of keeping up an agreeable warmth among the tender objects of parental solicitude.

Professor Johnson, after stating very fully, all the objections to

which the present system of warming houses is liable, recommends a plan for effecting this important object, and at the same time keeping up a constant ventilation of each apartment by means of heated air; for a description and drawing of which, and also some interesting tables connected with the subject, we refer the reader to the twenty-third volume of the *Scientific Journal* already mentioned.

WINE DRINKING AMONG THE ROMANS.

It was not until upwards of six hundred years after the foundation of Rome, that vines were cultivated, and that wine came into general use; previously to that period wine was so scarce that in the sacrifices to the heathen deities the libations were made only with milk. Numa, the successor of Romulus, who enacted this observance, directed, in consequence of the great scarcity of wine that prevailed, that no man should besprinkle the funereal pile with it; and when, afterwards, the offering of wine to the gods in sacrifice was permitted, it was decreed, with a view to encourage the planting of vineyards, that all the wine so offered should be the produce of such vine plants as had been cut and pruned by the person offering it.

According to Marcus Varro, quoted by Pliny, in the year 675, after the foundation of that city, Publius Licinius Crassus, and Lucius Julius Cæsar, the then censors, published an edict, and proclaimed, that no man should sell any Greek or Armenian wine in the city of Rome, under eight *asses* the amphor or quadrum.

Of *Chios*, a Greek wine of great celebrity, no person in those days was indulged with more than one draught at a meal; a proof of this is given by Varro in the instance of Lucius Lucullus, who, when a boy, never saw more than one cup of wine served up at his father's table after dinner.—Unfortunately, this same Lucullus in after life appears to have forgotten the lesson of temperance taught him under the parental roof, for we find that when he returned out of Asia, in an entertainment which he gave to the citizens of Rome, he distributed among the populace more than one hundred thousand gallons of wine.

It is said of Caius Lentulus the pretor, that he never used wine on account of its dearness, until it was prescribed to him by his physicians, in consequence of a trembling of the heart with which he became affected.

We read, that Lucius Papirius, general of the Roman armies, when on the point of engaging the Samnites, made no other vow than that he would offer to Jupiter a small cup or goblet of wine in case he gained the victory: which shows how rare and costly an article wine was in those days.

It was in these times of simplicity, when Roman patriotism and virtue was at its height, that women were forbidden to drink wine, to preserve them, as the ancient lawgivers of the republic declare, from the commission of excessive crimes. It was permit-

ted, therefore, to the near relations of a female to salute her when she came to their houses, in order to smell whether she had tasted wine—if this was discovered to be the case, the husband or parent had the right to punish her for her transgression.

According to Dionysius of Halicarnassus, Romulus was the author of the law which permitted a husband to kill his wife for drinking wine, as well as for the crime of adultery. It is related of Ignatius Mecennius, that he put to death his wife with a cudgel because he found her drinking wine out of a cask, and that he was acquitted by Romulus of this murder. Fabius Pictor, in his *Annals*, says, that a Roman lady was starved to death by her own relatives for having picked the lock of a chest in which were the keys of the wine cellar. We are assured by Pliny, that Cneius Domitius, a judge in Rome, in a like case pronounced sentence judicially against a woman who was defendant, in this form, “that it seemed she had drank more wine, without her husband’s knowledge, than was needful for the preservation of her health, and therefore, that she should lose the benefit of her dowry.”

Men in those days were also forbidden to taste wine until the age of thirty years. Towards the declension of the commonwealth, however, and under the first Emperors, the use of wine became more common; and we find very soon its abuse enumerated as one of the vices of Rome. Then women were not only accustomed to drink of it, but often carried the excessive indulgence in it as far as the men, which, if we credit Pliny, far exceeded any thing of the kind in modern times.

Before closing, we may say a few words, in relation to the use of wine among the Greeks, who have very generally been reproached with their excessive love of this intoxicating drink.—Their parties of pleasure being stigmatized by some writers as little else than mere drinking matches. The charge, however, must be received with considerable allowance. The Greeks were undoubtedly acquainted with the cultivation of the vine from a very early period; the soil of their country being exceedingly propitious to its growth, while luxury had made great progress among them at a time when the manners of the Romans still retained their pristine simplicity. Hence we find in the older Greek writers, more frequent mention of the convivial excesses of their countrymen, and more particular allusions to the wines which they drank, than are to be found in the contemporary authors of Rome. Yet, although they may have often violated the laws of temperance, they were in general studious to preserve a certain degree of decorum in their feasts, and very seldom gave themselves up to such gross debauchery as disgraced the Roman name under the emperors. When they drank freely, their wine was always much diluted; to use it otherwise was held to be a proof of barbarism. In one respect, there was a remarkable contrast between the customs of the two nations: the Romans allowing the women to mix in their festive meetings, but forbidding them the use of wine; while the Greeks permitted them to drink wine, but excluded them from all entertainments at which

any but near relatives were present. At the banquets of the heretical ages, however, the females occasionally appeared, performing the functions of cup-bearers, and other menial offices.

OLD AGE OF A REFORMED SENSUALIST.

The following communication has been upon our table for some months past. By whom it was written we are not informed, nor yet, whether it is a description of the author's own experience, or merely a fictitious representation of some of the more usual pains and penalties consequent upon youthful dissipation and folly. All we know is, that it very faithfully exhibits the experience of thousands, who, in the language of an old writer, "in the spring time of life tasted freely of all which they were pleased to denominate the pleasures and delights of life, and who afterwards have the recollection of their youthful exploits forcibly recalled to their memories, if not by feelings of remorse, at least by aches, and pains, and disabilities which deprive them of happiness, and often render the remnant of life a wearisome burden."

We insert the letter in hopes that it may serve as a useful warning to such of our readers as have not yet been fully convinced that the greatest amount of pleasure and the most lasting enjoyment are to be derived from a regular and temperate mode of life;—by the use of the good things of this world without their abuse.

Man, Messieurs Editors, has been thought by some to be a reflecting and rational being; and yet actually from a survey of his general conduct, one would scarcely imagine he ever reflected or reasoned at all, but on the contrary that he was led merely by impulse, and lived only for the present moment. Experience has shown that the happiness of after life, especially of old age, depends in a great measure upon the regularity of youth, and yet, what little forecast is there discernable, in most young men, to make a reasonable and happy provision for their future days? Impulse and passion, or mere caprice, in general, are their bosom counsellors.—Few have judgment enough to discern what course of conduct is correct and commendable, and still fewer have prudence and resolution, when convinced of their folly, to correct it. They are too often altogether impatient of instruction and reproof, blind to the lessons of experience and deaf to the commands of reason and of virtue. Hence they become the obedient slaves to the impulses of their inordinate passions, and false pleasure forms their principal delight.

I have been carried into these reflections by a very dearly purchased experience of their truth. I had the good, or perhaps the ill fortune to be born with an excellent constitution and an income sufficient to have supported me in the progress of any study to which I might have devoted myself, and with faculties so quick and lively, that I impute in some degree my neglect of application to nothing more than the uncommon vivacity of my mind. I read men more than books, and studied the surface of things instead of penetrating

within them. It was my misfortune to make at a very early period an improper choice of companions. The serious, thoughtful and sedate—they who led sober and industrious lives, were to me dull and insipid—from them I fled, while the gay, the careless, and they who sought only after present enjoyment, were the companions I most admired, and whose society I frequented. Notwithstanding the extent of my income, my ill chosen friends, by their encouragement and aid, soon enabled me to consume it, as well as the principal from which it was derived. Schemes of pleasure and dissipation occupied all my thoughts and absorbed all my time, and if ever any unwelcome reflection upon the folly and extravagance of my conduct, came to recall me from my errors, *wine* was the remedy to which I had recourse to drive from my mind the intruding fiend. Strong drink became, at length, the only object of my desires. I rose up early to steep my senses in intoxication; and the day and night too often found me in this manner deprived of reason.

The inconveniences and shame to which this course of life subjected me on all occasions, when I accidentally found myself sober, gave a happy turn to my thoughts, and the decay of my fortune awakened my reason, and was instrumental in producing my reform. I now thought it time to recover what I had lost. I gave up at once my riotous companions—renounced for ever the cup of intoxication—completely reformed my habits and applied myself with all diligence to the study of the law. In a few years, I was admitted to the bar, and became eminent enough to replace my wasted fortune with a plentiful interest. I am now retired from practice, and can review what I have done for others, without any reason to repent that I have enriched myself. My only penance, and I fear that nothing but death will end it, is the sufferings I endure for follies committed when I had no thought. My body, in almost every member, daily reproaches me; and every change of season, and each alteration of the air adds severity to my pains.—In this particular I am esteemed as a well regulated *barometer*; and more deference could not be paid to my prognostications of the weather, than if I had it entirely under my control. I am constantly ailing without being able to direct the attention of my medical adviser to any definite disease—or rather among the multiplicity of my complaints I find it impossible to point out the particular one from which my present sufferings arise. The least exertion puts me out of breath and exhausts my strength—my appetite is ravenous, or I have no taste for my food—I am oppressed with heat when the weather is the least warm, and suffer agonies almost insupportable when the north wind blows—when I study for any length of time, my sight fails me entirely, and my head feels as though it would burst—and when I endeavour to seek relaxation in some innocent recreation out of doors, I am quickly driven back into my chamber, as well by a violent and sickening palpitation of the heart as by fatigue. Such, Gentlemen, are some of the sufferings of a Reformed Sensualist.—They are not now revealed to dissuade any one from reforming his life, for with all my sufferings I feel happier.

now than in my youth, when my apparent course of pleasure was the envy of my companions; but rather to dissuade all from ever falling into such a disorderly conduct as may call for reform. True pleasure and temperance—a life of order and of happiness, are far more closely connected than many would appear to imagine.

X.

Contribution to a Natural and Economical History of the Coco-Nut Tree—By HENRY MARSHALL, Esq.—The coco-nut tree (*Cocos nucifera*) belongs to the natural family of Palms, and is arranged under the class *Monæcia*, order *Hexandria*, of Linnæus. In regard to the variety and utility of its products, it is the most interesting of the family. It is found in the intertropical Asia, Australia, America, and Africa. Like all other equinoctial plants, the coco-nut tree becomes less luxuriant as it approaches the tropics. In the neighbourhood of Lucknow, which lies in N. lat. $26^{\circ} 24'$, though the tree grows, it does not produce fruit. Requiring for its perfection a mean temperature of 72° Fahr. the proper climate is from the equator to the 25th parallel of latitude, and in the equinoctial zone to an altitude of about 2900 feet;—thus occupying a zone of 25° of latitude on both sides of the equator, which includes nearly four-fifths of Africa, one-eighth of Asia, one-third of America, and excludes Europe.

The structure of the family of palms is peculiar. Their general form is a cylindrical column crowned with a circular tuft of large leaves. Unlike the Dicotyledonous plants, which have under the bark concentric layers of annual growth and a canal of pith in the centre, the stem of the palm is formed of a mass of longitudinal fibres, placed without apparent order, and enveloped in medullary substance. The fibres and cells are largest in the centre, and more delicate and close as they approach the circumference. In habit and structure the palms resemble the ferns, in their blossom the grasses, and the asparagi in their mode of fructification.

The coco-nut tree grows to the height of from 60 to 110 feet, and is generally from one to two feet in thickness. From the structure of the tree there are no branches, but the stem is marked with parallel rings from the cicatrices of the fallen leaves, about two of which separate annually. The stem is crowned with a tuft of from twelve to fifteen leaves, twelve or fourteen feet long, composed of a double row of opposite sword-shaped leaflets, in length from three to four feet. The flower is axillary, proceeding from a large single-leaved pointed spathe, which always opens on the under surface.—Each spike has towards its base one or two female flowers, the others being male. The male flowers have six stamens and the female three stigmas. The calyx has three divisions, and the corolla is formed of three petals. The drupe and nut are too well known to require description.

When coco-nuts are intended for seed they are placed close to one another with the holes uppermost, and covered with a small

quantity of earth. In a short time the aqueous fluid is absorbed, and the cavity becomes filled with a spongy white substance. Through the largest hole the plumula appears, and sometimes along with it the radicles, which run downwards on the outside of the shell. The seedlings are allowed to remain in this state for about a year before they are transplanted. Holes of about two feet deep and from twenty-five to thirty feet asunder, are dug in the field intended for a coco-nut garden, and the young shoots put into them. Fruit is produced in five or six years, but the produce is rarely abundant before the eighth or ninth year. The coco continues to yield fruit for sixty or seventy years. In good soils, and in moist seasons, the tree blossoms every four or five weeks; hence there are generally fresh flowers and ripe nuts on the tree at the same time. There are from five to fifteen nuts in a bunch, and in good soils a tree may produce from eighty to a hundred nuts annually.

The economical uses of the coco-nut tree are important and various, and no single vegetable production in the countries which produce it equal the coco in value to the inhabitants. The slender roots are formed into baskets; the woody shell of the stem is used in the construction of huts; the reticulated substance formed at the base of the leaves is employed as a filter; and the leaves themselves form a very substantial covering or thatch for houses. Even whole houses, walls and roofs, except the mere frame-work, are frequently formed of coco leaves; and during the insurrection in the Kandyan country in 1818, almost all the sick soldiers were accommodated in hospitals of this construction, which are capable of protecting from the weather for upwards of a year.

In a domestic state, elephants are fed chiefly upon coco-nut leaves, and this animal evinces much sagacity in separating the elastic woody fibre from the thinner margin of the leaf. The leaflets are sometimes used to write upon, and the instrument employed for this purpose is an iron stylus, similar perhaps to the stylus of the Romans and other ancient nations.

The flower and fruit of the coco, however, afford the most important products. By a particular manipulation the flower yields a rich saccharine juice, which is convertible into arrack or sugar.—A man, in colloquial language called a "Toddy-drawer," cuts off the point of the spadix, and ties the stump firmly with a ligature. It is then daily beaten with a stick, to determine the sap to the wounded part. In a few days the juice begins to flow from the cut surface of the flower, and is carefully collected in an earthen vessel suspended from the spathe. A thin portion of the flower and spathe is sliced off daily, and the end of the stump bound up. A good healthy blossom will give from two to four English pints of sweet juice daily, and some will continue to yield juice for four or five weeks. When it is intended to draw juice from a "tope" or cluster of trees, the toddy-drawer connects the heads of a great number of trees by means of the stems of creeping plants, or with coir rope. He ascends a central tree by means of bands of a creeper placed

at intervals, collects the fluid in a gourd, and conveys it to the ground with a line.

Toddy is the name given by the English to the sweet juices extracted from the different species of palm. When fresh drawn it is sweet, and has a peculiar flavour. In a half-fermented state it is much relished by some Europeans. When it has become by fermentation highly intoxicating, the European soldiers and the dissipated portion of the natives drink it freely. Arrack may be distilled from the juice the same day it is drawn. The process of distillation is carried on in the maritime provinces of Ceylon in copper stills, but in the Kandyan provinces earthen vessels are chiefly employed. The toddy yields about one-eighth part of proof spirit. Arrack is issued to the soldiers in India as part of the established ration; and the Royal Navy are furnished with the same spirit in place of rum. Batavian arrack is made from a mixture of molasses 62 parts, toddy 3 parts, and rice 35 parts, and 100 parts yield $23\frac{1}{2}$ of distilled proof arrack.

A kind of sugar named *jagery* (perhaps the sugar of the ancients) is made from the juice of the coco; it is also used as yeast by the bakers in Ceylon; and by allowing it to pass into the acetous fermentation an excellent vinegar is obtained.

The kernel of the coco-nut is eaten by the natives in various forms; and it has been said that the person who possesses a garden with twelve coco-trees and two jack trees has no call to make any exertion. The oleaginous fluid used in making *curry* is from the coco-nut, and large quantities of oil are prepared by expression for exportation. In Ceylon this oil is universally used as a lamp oil, and in England it is now manufactured into candles which closely resemble those made of wax. Gas from coco-nut oil has been found superior to artificial light from any other substance.

Besides these products, the outer husk or fibrous pericarp of the nut is employed in the manufacture of *coir* yarns and cordage. The rind is prepared by soaking in water for several months and then beating it upon a stone with a heavy piece of wood. Coir cordage, when properly prepared, is pliable and smooth, strong and elastic, and is much used on all the coasts of India. It is almost the best material yet known for cables, on account of its elasticity and strength. Coir is also used to stuff mattresses, saddles, &c. Sago is prepared from the cellular substance in the interstices of the stem of this and other species of palm.

PROGNOSTICS OF THE WEATHER.

Prognostics, or those circumstances which point out beforehand certain changes, that are about to take place in the weather, may be divided into those which are derived from the observance of the sky, and of meteorological instruments; and those which are deducible from the habits and motions of particular animals and plants.

The popular prognostics of storms, rain and other changes of the weather, which, with very little variation, are common in most countries, seem to have been known and observed with accuracy of old. Indeed their being common to almost every age and country, affords the strongest confirmation of their truth. Although we find familiar mention of the signs of the weather in the works of Homer and Hesiod, and among almost all the oriental writings, yet Theophrastus the Grecian naturalist, seems to have been the first who cultivated this branch of meteorological science, and collected together the proverbial rules for judging the weather; which were shortly afterwards put into verse by Aratus the poet, above two thousand years ago; and are imitated by Virgil, Lucan, Pliny, Seneca, and others. With very trifling variations, the same rules are to be found scattered among numerous works of natural history and of science. And they are popular among the lower classes of modern Europe; especially mariners, fishermen, shepherds and the like, whose lives are spent chiefly in the open air, and whose interests render them close observers of many of the phenomena of Nature.

It was long ago observed by the ancients, that, from the peculiar motions and habits of many animals, the consequence probably, of their sensations of pain and pleasure, a very accurate judgment might be formed of the approaching changes of the weather; neither has this escaped entirely the notice of more modern meteorologists. It is difficult, perhaps, to conceive of the manner in which animals become sensible of the approach of particular kinds of weather. We cannot suppose that they are forewarned of it by the appearances of the sky, at least in many cases; for some animals express signs of uneasiness previously to an alteration of the weather, long before there are any visible signs of change, and often when they have no opportunity of observing what is going on abroad. Dogs, for instance, closely confined in a room, frequently become very drowsy and stupid before rain, and are almost incapable of being aroused. The same, in a less degree, is observable of cats. And a leech or frog, confined in a glass jar filled with water, has been found, by its rapid motions, or its quiescence, to indicate wet or fair weather. From an examination of the structure of the brain in the lower classes of animals, they do not appear organized to have any distinct notions of causation; but they can observe, nevertheless, that two particular things are conjoined, or that they follow one another; and thus perceiving one they anticipate and prepare against the occurrence of the other. Mr. Forster, from whose interesting work on the atmosphere we have borrowed most of the following remarks, seems to think that the prognostication of the weather by the inferior animals, results from some impression upon their sensations at the moment, rather than from any accurate observation of preceding phenomena. Peculiarities in the electric state of the atmosphere may, he conceives, be supposed to affect the constitutions of animals in the same manner as they appear to do ours, and may thereby excite in them either pleasureable or uneasy

sensations. It is not our intention on the present occasion to give a list of all the popular prognostics of the weather, derived from the actions and habits of animals: we shall merely notice some of the more noted of them. Thus,

Rain may be expected when the swallow flies low, and skims backward and forward over the surface of the earth and waters, frequently dipping the tips of her wings into the latter. When, also, bees do not range abroad as usual, but keep in or near their hives, we may expect wet. Before rain, swine, as well as poultry, appear very uneasy and rub themselves in the dust. Before and during rain, ducks, geese and other water fowl wash and dive in the water more than usual. If we happen to be abroad, when, after long continued dry weather, the sky is lowering, and rain approaching, we may frequently observe the cattle stretching out their necks, and snuffing in the air with distended nostrils; and often before storms, they assemble in a corner of the field, with their heads to the leeward. Sparrows chirp particularly loud during rain, and often begin before it falls, affording in this manner, for some time previously, an indication of its approach. Mariners at sea expect a storm when the stormy petrels, *Procellaria pelagica*, shelter themselves in numbers under the wake of the vessel. When the sea gulls come in numbers to the shore, and make a noise about the coast; or when at sea, they alight on ships, the sailors consider it a sure foreboding of a storm. These circumstances were known of old. Before storms, too, the porpus, dolphin, and grampus come to the shore in large bodies.

In the economy of nature, we find that plants like animals, adapt their motions to their wants: some expand their flowers to the Sun, and close them at eventide; others expand their flowers in the evening, open before rain, or perform various other functions, the result of their particular natures, and to which the various states of the atmosphere are specific stimuli. From an accurate and constant observance of these, many prognostics of the ensuing weather have been deduced; some of these Mr. Forster inserts, rather, however, on account of their popularity, than because he had noticed most of them himself.

The chickweed has been said to be an excellent weather-guide. When the flowers expand freely, no rain will fall for many hours; if they so continue open, no rain need be feared for a long time. In showery days the flowers appear half concealed, and this state may be regarded as indicative of showery weather; when they are entirely shut we may expect a rainy day. If the flowers of the Siberian sow thistle remain open all night, we may expect rain next day.—Before showers the trefoil contracts its leaves, as does the convolvulus, and many other plants. To these, the closing of the flowers of the pimpernel, and numerous other floral prognostics might be added.

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THE FLORAL MAGAZINE.—HORTICULTURE.

We have had for some time lying before us the two first numbers of *The Floral Magazine and Botanical Repository*, published by the Messrs. Landreth of this city. This work, whether considered in reference to the interesting nature of the subjects of which it treats, the accuracy and elegance of the illustration by which the text is accompanied, or to its mechanical execution, well deserves the patronage of the man of taste, as well as of the public generally. The culture of flowers and of fruits is one of those innocent pursuits, which, while it is, to a certain extent, within the reach of every individual, whatever may be his age or situation in life, presents attractions to which few are found totally insensible. To cultivate this almost universal love for flowers, and to point out the manner in which its gratification can be best secured, are two of the chief objects which the Messrs Landreth had in view in undertaking the present publication.

We are all, remarks an attractive writer of the last century, generally speaking, born as it were gardeners—our very first inclinations prompt us to the culture of fruits and flowers. We are divided with regard to nearly all our other tastes; our love of gardening is the only disposition which re-unites us.

Whatever difference the necessities of life, or the customs of society, may create in our employments, we seem almost invariably to remember the original state of man, being one of perfect innocence, in which he could enjoy no paradise superior to a garden. Every other pursuit seems to degrade or quickly to disgust us, but whenever we can disengage ourselves from our common occupations, and can breathe in freedom for a few moments, we are sensible of a secret propensity which allures us to a garden. The merchant, the student, as well as the artizan, thinks himself happy when he has an opportunity of retiring from his counting house, his books or his work shop, to the care of his flowers and the other occupations demanded in a garden. It is an employment that naturally fills the mind with calmness and tranquillity, and lays all its turbulent passions at rest; it is eminently friendly to health, opens to our view much of the goodness and wisdom of Providence, and suggests innumerable subjects for pleasing and useful meditation. But gardening

presents not merely a source of innocent and even attractive recreation; it is, also, of very great advantage to man; it not only occupies advantageously his leisure hours, but it contributes in no small degree to his comforts. The most salutary productions with which nature has arrayed the hills, the plains and the valleys, may be assembled and brought to the greatest perfection within the garden. It becomes in this point of view the great magazine of man's sustenance, remedies and amusements. There he daily gathers the produce of the various seasons and of different climes, and is there able to distinguish the first rudiments and improving growth of those gifts, which are at once the incentives prompting him to the careful attendance, and the reward, of his labours. In this manner he enjoys at the same time, the present plenty and the promise of a future and increased fertility. Few delights can be superior to those which arise from cultivating with our own hands "a little spot of earth," where every object that meets the eye tenders to us some agreeable object, and seems kindly sedulous to supply our wants, and to regale our senses with an unceasing variety of agreeable impressions.

It is from these causes that the art of gardening has had in all ages, and in almost every part of the world, its admirers. The greatest princes, the wisest philosophers, the most active politicians and the bravest warriors, as well as those of more humble station; have all evinced their love for its pursuit. Many of the famous gardens of the ancients have been elegantly described by the greatest of poets and historians. Every scholar must have read with delight Homer's picture of the garden of Alcinous, and Virgil's account of that of the old Corician.

"In our 'native land,'" remarks the Editor of the *Floral Magazine*, "the study of botany and culture of plants, was (were) but slightly attended to previous to the revolution; and with the exception of one or two collections of indigenous vegetables, one of which, that of Bartram, exists at the present day with increased splendour, an advantage to the country and a monument to the founder; nothing worthy the name of a Botanic Garden existed in America. Nor was it until years after the nation had achieved its independence, that public attention was directed to the subject.

"Happily, however, a relish for botanical pursuits has grown with our growth, and strengthened with our strength. Now our country possesses many private collections of vegetable treasures, with nurseries for their increase and dissemination, which would

not be discreditable to the old world; and we hail the day as not far distant, when public liberality shall found a *National Botanic Institute at the capital of the United States.*"

It does not often happen, that physicians are encouraged to additional devotion of their time and health, in seasons of pestilential visitation, by the voice of popular applause, or rewarded for laborious and disinterested and successful efforts by thanks and medals from corporations or legislatures. Happily for the reputation of the profession, and still more fortunately for the community, medical men find other stronger and more animating and enduring incentives to a liberal exercise of their high calling. A solemn sense of duty, the pleasure of relieving suffering, the exercise of intellect, in the various combinations of reasoning and judgment, are the chief sources of consolation and encouragement to a physician when he toils night and day and exposes his life and undergoes often obloquy, to administer relief to the poor and the abandoned. The wealth and the honours to which a physician might legitimately lay claim are seized by other classes. The quack gets the money, and some brawler at a public meeting receives the vote of thanks or the medal, for having put his nose once a month into a hospital in which a physician spends hours daily. But if the instances are rare of public honours being awarded to physicians, we must experience the more pleasure in recording them when they do occur. Hence we seize with avidity the opportunity afforded on our part, of giving all possible publicity to a notice of the gratifying spectacle exhibited in this city on Thursday last, the 7th March. We derive the details from the United States Gazette.

"Cholera Physicians in Chief.—It is not unknown to most of our readers, that the former Councils of this city voted to each of the Physicians in Chief of the Cholera Hospitals in this city, a splendid silver pitcher, as a testimony of the city's gratitude for their efficient services during the prevalence of the Cholera last summer. The vote of gratitude includes also the Sisters of Charity, but the rules of their order did not allow them to accept any thing as an acknowledgement for their services. By a vote of the present Councils, the Mayor of the city and the presidents of the Councils, were directed to convey to the Physicians in Chief, the tokens of the city's gratitude in such terms as they should deem proper.—Agreeably to previous arrangements, the physicians were invited to meet the city authorities, yesterday at 12 o'clock, M., in the Common Council chamber; when at the hour prescribed a large concourse of citizens assembled.

In the centre of the council chamber a table was placed, on which stood the THIRTEEN large Silver Pitchers, engraved upon each of which was the expression of the city's appreciation of services rendered, and the name of the physician to whom it was voted.

The President of the present Common Council, HENRY TROTH, Esq. and the President of the late Common Council, JAMES PAGE, Esq. took the seats of the presiding officers, and at their right was the Recorder of the city, JOSEPH McILVAINE, Esq. Between the table and the President's desk, the Mayor of the city was seated, and in front of him were the gentlemen of the faculty. A considerable number of the members of the present and some of the late Councils were present. The pitchers were then presented to the Medical gentlemen, with the following address from the Mayor.

MAYOR'S ADDRESS.

Gentlemen—The duty of presenting to you on behalf of the City Authorities these testimonials of their respect and gratitude is truly a delightful one. How that respect has been challenged and that gratitude nobly won, it is unnecessary for me at this time to repeat. The history of your prompt, disinterested and fearless exertions at a season of great public calamity, and of unprecedented alarm, is fresh in the recollection of this community and will not be forgotten, while manly courage, pure benevolence, and high professional attainments, continue to be the subjects of general admiration and esteem. That you may long live to adorn society and to advance your profession, to sustain the high character of our city for medical science, to carry health and comfort into the abodes of sickness and suffering, and to enjoy the merited confidence and sincere affections of your fellow citizens, is a prayer, dictated alike by the feelings of my own heart and by the UNANIMOUS sense of a grateful community.

To which Professor Chapman, on behalf of his medical brethren, made the following reply:

PROFESSOR CHAPMAN'S REPLY.

It has devolved on me, sir, to convey through you and the City Authorities, the expression of the deep sense entertained by my colleagues and myself, of the distinguished recognition by that body, of our services during the prevalence of malignant cholera in this community. We cannot, however, claim for ourselves, any exclusive merit. The profession to which we belong, under such circumstances of appalling disease, has never failed to come forward with its best exertions, to stay and mitigate the calamity; and on the last occasion, there was not a single member of it, within our knowledge, who proved recreant in duty.

Much of the success in the management of the epidemic, which has been too partially ascribed to us, must be ascribed to the wise and provident regulations of the Councils, and to the harmonious and efficient co-operation with us of their executive committee, in-

cluding the Recorder, and your immediate predecessor in office, to all of whom, we beg to tender our respectful acknowledgments.

It were, too, an injustice to withhold a large share of credit from those junior physicians attached to the hospitals committed to our charge, who by day and by night, at some heavy sacrifices, devoted themselves to the sick, with a zeal that never relaxed—alike signalizing their skill and humanity.

Nor are we unmindful, sir, of your own disinterested and heroic conduct, in one of the most trying scenes of hazardous benevolence.

We are sensible of, and duly appreciate the gracious manner in which you have addressed us; and cordially reciprocate all your kind wishes.

The whole ceremony was simple but impressive; the vote of the Councils, which authorised the expression of thanks, was creditable to these bodies, and expressive as we believe, of the sense of the community.”

We have only to add to the preceding account the names of the gentlemen who have been thus honoured.—They are Drs. CHAPMAN, OTTO, PARRISH, HORNER, JACKSON, LUKENS, HARRIS, MEIGS, HARLAN, J. K. MITCHELL, EMERSON, HODGE and TAYLOR.

These were the physicians in chief of the Cholera Hospitals of the city proper. The county Hospitals and their physicians were under the jurisdiction of the Board of Health and Cholera Medical Board.

We solicit the attention of our readers to the subjoined notice which we have extracted from one of our London Medical Journals. The more complete the history of Cholera becomes, the more evident is the correctness of the opinion which we have all along fearlessly advocated in the *Journal of Health*, viz: that the disease is not contagious. Amidst doubts and fears, and attempts to steer a middle course, by supposing cholera to be sometimes epidemical and sometimes contagious, we have never shrunk from a free and plain expression of our conviction, derived from a careful perusal of the East Indian accounts, that cholera had no more claims to be considered contagious than our own cholera morbus or cholera infantum, or bilious cholic, or bilious fever. We have on this ground pointedly reprobated, as exciting unnecessary alarm, and of mischievous tendency, by provoking the very ills they profess to guard us against, all quarantine restrictions and impositions. The use of ardent spirits and its consequences, poverty, misery and physical and moral degradation, are the real causes and concomitants of cholera, which Boards of Health and Sanitary Committees ought

to endeavour to abolish, as they would the worst and most pestilential nuisances.

Believing, however, as we so fully do, that the cholera is not a contagious disease, it does not follow, on this account, that hospitals expressly for the reception of cholera patients are uncalled for and unnecessary. The number of the sick, the suddenness and alarming nature of the attack, the urgent call for prompt assistance by medicine and nursing, seem to require an arrangement and co-operation which common hospitals could not so well admit of in justice to their customary occupants. These latter also, could not but be greatly disturbed and alarmed by the appearance and peculiar symptoms of cholera patients, who fortunately have not any great sensibility in this respect in regard to seeing each other. We give the notice to which we have already referred:

“We understand that the Central Board of Health is to be immediately dissolved—a fact which gives us much pleasure, not from any hostility to its members, or jealousy of their emoluments or good quarters in Whitehall; but on account of the cause of their medico-political dissolution—the cassation of cholera in the Metropolis, as well as in most other parts of the Kingdom.

“The last measure that emanated from the Central Board, was the wisest and the best that was ever engendered there—a recommendation to the Hospitals of the Metropolis, and, consequently, to all other public Institutions of this kind, *to receive cholera patients, in future, as they would patients labouring under any other disease!* This speaks for itself; and happy would it have been for society, in this country, had “CHOLERA HOSPITALS” never been projected, and had the sick been received into the public institutions already in existence. When they were filled, it would have been time enough to construct others as appendages, but not as *pest-houses*, which frightened and prejudiced the poor against such asylas. One thing is clear—that if it be right, in future, to receive cholera patients in public hospitals, it would have been right in times past.”

We have been favoured through the kindness of William H. Keating, Esq. with a copy of the *Report of the Committee appointed to investigate the local causes of Cholera in the Arch street Prison, in the city of Philadelphia*. The committee were also authorized to inquire into the sufficiency of the legal provisions for the maintenance of untried prisoners and debtors, and report alterations and amendments with respect to the regulations affecting their condition. This is a valuable document both as regards the narrative of the cholera in the Arch street Prison, and the exemption in a great measure of the

Walnut street Prison, and the entire escape of the Eastern Penitentiary—and also for the exposition of prison discipline, the causes of crime and the means of reform. We cannot but commend the industry and good sense evinced by the chairman of the committee, Dr. Gibbon, who is we understand, the author of the report.

“The first case of cholera,” says the reporter, “that occurred in the Arch street prison, was noticed on the 13th of July, which, although prescribed for at the time as cholera morbus of an ordinary character, would, in the opinion of the physician who attended the prisoners in that jail, have afterwards been considered an undoubted case of epidemic cholera. This disease is said to have first appeared in Philadelphia on the 5th of July, but did not fairly make its attack until the 27th or 28th of that month, although several cases were scattered about the city and its precincts. It raged most fiercely there, from about the 4th to the 22d of August. On the thirtieth of July, the day the epidemic cholera broke out decidedly in the Arch street jail, there were confined in the criminal apartments of that prison, 170 men and 110 women, besides 30 in the debtors apartment, making a total of 310 persons of different ages. The committee are informed, that the general average of committals to the criminal side of this prison, is from 12 to 15 a day. There were twelve new prisoners who entered, upon the 29th July, and 24 were sent in on the 30th. In the month of June preceding, there had been 541 committals to this prison; during the month of July, 598; in August, there were 208; and in September, 437.

“The disease first appeared in the women’s apartments, in the person of a female vagrant who had only been a day or two in the house. Those prisoners who had recently entered the jail, suffered the most, and were generally affected the first by the cholera; in some cases within twenty-four hours after their confinement. They were, however, principally old vagrants, who were constantly in and out of the jail. Some, also, who had been two years confined there, died of the disease.—The prisoners were principally untried or vagrants. The other convicts did not exceed eight or ten, who were chiefly imprisoned for minor offences; one was a prisoner of the United States, for passing counterfeit money. On the 2d of August there were 13 new cases of cholera in the jail, and 4 or 5 old cases; there had been two deaths, and the number of the diseased appeared rapidly increasing. The rooms used as hospitals became crowded, and the sick were brought into the great hall.—There was an interval of several days before the epidemic occurred on the men’s side: when it did, it seemed, according to the description of a keeper, ‘like a shock of electricity.’

“The cries, shrieks and groans of the sick and dying; the frantic desperation and agony of those who were eager to escape, and the difficulty at the moment, of deciding upon all the points of most interest to the welfare of the prisoners and that of the public; are described as in the highest degree distressing and embarrassing to

those who had them in charge. On the night of the 4th August, the diseased were so numerous upon the floors of the extensive halls, that the keepers had difficulty to avoid treading upon them, as they performed their duties. About eighty persons were lying dead, dying or suffering, with this epidemic, in the building. The dead were necessarily kept all night in the jail, because the keepers feared to open the doors, lest the prisoners, for whose security they were responsible, should attempt to escape.*

"On the night of the 4th of August, two cart loads of coffins were sent to the jail, by the coroner, whose certificate declares that 'between the 2d and the 10th of August, he caused to be buried from the Arch street prison, forty-nine persons.' This account of the number of deaths, we are assured, is the lowest; for the coroner is not prepared to say there were no more; the grave digger cannot certify with accuracy; and the keepers, overcome with fatigue or disease, and the excessive accumulation of duties, are not positive of the number who died. The chief keeper attempted to register them, but was unable to proceed. Prisoners entered the jail at different times by different names, which are placed upon the books, according to their declarations, although they are known to their fellow prisoners by other names.—It was impossible, upon such an occasion, for the usual investigation to be made. We have, therefore, no accurate enumeration of the deaths during this terrible catastrophe. Indeed it could not be expected that the ordinary details of duty should, under such circumstances, be fulfilled. The keepers, nurses and physicians, were generally subjected to the influences of the epidemic, and in a greater or less degree suffered from them. A member of the society for alleviating the miseries of public prisons, who carefully investigated this subject, thinks the total mortality until the 10th August, amounted to fifty-two, including those sent to the cholera hospitals, those in the prison, and two who were found dead on the roads some distance from the city, having sunk under the disease after being discharged from the jail. About ten died after that date, making, by his estimation, a total of sixty-two deaths. Another gentleman of this society states the total number at about eighty, and a third mentions fifty-seven. It is impossible to decide the exact number who died."

We propose to recur to the subjects treated of in this report and probably to make additional extracts for our next number.

The public demonstrations in favour and support of Temperance, in nearly all parts of the United States within these few months past, present a most gratifying spectacle to every true patriot and lover of his species. In this city the organization of Ward Societies

* By act of 4th April, 1807: "If any jailor shall be convicted of having, by his negligence, suffered any prisoner committed to his custody to escape, he shall forfeit and pay, for every such offence, a sum not exceeding three hundred dollars."

is going on with commendable zeal and success, and already we find enrolled among them the names of some of our most distinguished citizens. Of these we may be allowed in reference to his lofty character and extended professional reputation, to mention Dr. Physick, who is President of the "Pine Ward Temperance Society." Many other gentlemen of the different professions, and indeed of nearly all callings, have promptly marshalled themselves under the banner whose motto is "ABSTINENCE."

A Temperance Society recently formed by some of the young gentlemen attending the Medical Lectures at the University of Pennsylvania, merits also distinct mention. It consists of upwards of 40 members from all sections of the country—as far north as Nova Scotia and south as Louisiana.

Among the Societies of recent formation, we regard with particular satisfaction—"The American Congressional Society" instituted on the 26th February last. It may consist "of members of Congress and all who have been members of Congress, officers of the United States Government civil and military, and heads of Departments." We have received, in pamphlet form, a detailed account of the resolutions and speeches which were offered and delivered at the meeting which preceded the formation of the Society. They are exceedingly interesting, but our restricted limits forbid at this time, our making even extracts.

From the Albany Argus.

HINTS TO FARMERS. No. IV.

The *planting of Trees*, for ornament and profit,—for fruit, fuel and timber, has for a long time engaged the active attention of the cultivators, and even the governments of Europe. The existing forests of England are said to have been all planted by the hand of man. The highlands of Scotland, after having been, by a reckless policy, stripped of their timber, have again been re-clothed with wood and beauty, by the indefatigable labours of the present and last generations. And to such a pitch has the taste for planting been carried in Germany, that the public highways, for hundreds of miles, present continuous avenues of fruit and ornamental trees, from which the traveller regales himself with freedom, and which contribute to the comfort and wealth of the inhabitants. The press has been enforcing the duty of planting, and furnishing directions for rearing of forests, and beautifying parks and ornamental grounds. A recent *Planter's Guide*, by Sir Henry Stuart, has just been published by the Messrs. Thorburns, at New York, and excited much public attention. I have not seen the work; but the extracts from it, which I have read, seem but ill adapted to our practice.—

They relate principally to an expensive mode of removing large trees from the forest to the park; an operation suited neither to our habits nor our means. It undoubtedly contains, however, useful instructions for planting, removing and pruning forest trees; and I hope it may be the means of awakening in our countrymen a more provident care of at least the trees we have left. For our taste has hitherto run counter to that of Europe. While they have studied to increase, we have been wantonly lavish in destroying, these lords of the forest. But we begin to perceive our error, and evince a disposition to correct it; the first evidence of which that I remember to have witnessed, was in the county of Berkshire—*where the first Agricultural society of practical farmers, was established in our country*, and where it yet continues to dispense unnumbered blessings. One of the early acts of that society was to encourage the planting of sugar maple, particularly by the road sides; and the wise foresight which prompted the improvement has now become apparent to all. I was acquainted with the valley of the Housatonic more than forty years ago. I knew it when its Agricultural Society was established; and I have traversed it with delight within the last few months. I know no district which has surpassed it in the measure of its improvement during the last twenty years. Its agricultural features,—its flocks and its herds;—its moral condition,—the intelligence and enterprise, the industry and happiness of its population, surpassed, in my mind, any thing I saw in journeying five hundred miles. And most of this prosperity and improvement, I ascribe, emphatically, to the benign influence of its Agricultural society. How gratifying to the fathers of this society, must be the reflection, that they have been thus instrumental in increasing the measure of human happiness, and of human virtue. I would not exchange the honour which belongs to them for the pageantry of a court, or the renown of a sanguinary victor.

Instead of adopting Sir Hanry Steuart's system of *removing* large trees, we would do well to *preserve* them, wherever they are not likely to interfere with the economy of the farm; and to plant small trees whenever they will conduce to ornament or use. In retaining, however, the second growth is preferable to the first. The habits of the first, like the habits of the aborigines, are better adapted to the forest than to the field, and when their tall forms are bared, by the labours of cultivation, they are apt to be prostrated by the winds. The second growth or small trees, grow up with more strength and beauty, and soon adapt their habits to their security. There are many grounds that are not profitable in tillage, which may grow trees without prejudice, and even to advantage, as pasture lands. A growth of forest or fruit trees is highly beneficial, upon the north and west side of farm buildings, in breaking off the cold winds in winter, and affording refreshing shade in summer.—The borders of enclosures and highways, afford also the means of at once enhancing its value, and beautifying the scenery of our farms. Besides, planting trees is a sacred debt which we all owe to posterity.

B.

ARTS AND ARTISTS.

Church Music.—As to the use of instrumental music in the church, Dr. Burney says:—"After the most diligent inquiry concerning the time when instrumental music had admission into the ecclesiastical service, there is reason to conclude, that, before the reign of Constantine, as the converts of the Christian religion were subject to frequent persecution and disturbance in their devotion, the use of instruments could hardly have been allowed: and, by all that can be collected from the writings of the primitive Christians, they seem never to have been admitted. But, after the full establishment of Christianity as the national religion of the whole Roman empire, they were used in great festivals, in imitation of the Hebrews, as well as Pagans, who, at all times, have accompanied their psalms, hymns, and religious rites, with instrumental music."

The organ was introduced into the Romish church by Pope Vitalian, about the year 670, as is generally allowed, although some writers suppose its introduction to have been much earlier. Dr. Busby quotes an epigram, written by Julian the apostate, about A. D. 360, (and first copied by *Du Cange* from the *Anthology*,) as a proof that it was introduced before his time. The following is the learned Dr's. translation of this epigram:—

"Reeds I behold, of earth the rigid spoil,
Reeds of a novel growth, and brazen soil;
That not heaven's wind, but blasts mechanic breathe,
From lungs that labour at their roots beneath;
While a skill'd artist's nimble finger bounds
O'er dancing keys, and wakes celestial sounds."

Ammonious thinks, that the organs were not used for ecclesiastical purposes till after 820, in the time of Louis the Pious; whilst Bingham affirms, that they were not introduced till after the times of Thomas Aquinas, giving the honour of their introduction to Marinus Sanutus, A. D. 1290; adding, "our church does not use musical instruments, as harps and psalteries, to praise God withal, that she may not seem to Judaize." It appears, however, from the testimony of Gervas, the monk of Canterbury, that organs were used upwards of one hundred years before he wrote, which was in the latter end of the twelfth, and the beginning of the thirteenth century; and it seems certain, that the introduction must be assigned to a period even much earlier than this. The Greek emperor, Constantinus, Copronymus, sent one to Pepin, king of France, about A. D. 755, as a present; and, in 812, one was built at Aix-la-Chapelle, for Charlemagne, which the Benedictine, D. Bedos de Celles, says, was the first that was furnished with bellows, and in which water was not employed. In 826, Georgius, a Venetian presbyter, visited the court of Louis le Debonnaire, and built an organ at Aix on the hydraulic principle.

Sir John Hawkins, in his *History of Music*, gives an engraving

of a very ancient monument at Rome, mentioned by Mersennus, in which an organ is represented. The antiquity of this monument is questioned, however, by Mason, in his *Essay on Church Music*. Cassiodorus, who was a native of Squillace, in the kingdom of Naples, where he was born, about A. D. 481, and who died about 577, describes the wind organ of his day as follows:—"The organ is an instrument composed of divers pipes, formed into a kind of tower, which, by means of bellows, is made to produce a loud sound; and, in order to express agreeable melodies, there are in the inside, movements made of wood, that are pressed down by the fingers of the player, and produce the most pleasing and brilliant tones." Vitruvius, who flourished a century before the Christian era, also describes the organ; and St. Jerome mentions one with twelve pair of bellows, which might be heard at the distance of nearly a mile; and another at Jerusalem, that might be heard at the Mount of Olives. The genuineness of this piece, ascribed to St. Jerome, in which these instruments are alluded to, is questioned by Mersennus.

There can, however, be little doubt but that, as early as the sixth or seventh century, organs were brought to a tolerable pitch of perfection, though still wanting much of that brilliance and fulness of tone, and variety of harmony, and exquisite mechanism, which distinguish the instruments of the present day; and that they were introduced into the church at least as early as the latter period, probably before. Towards the close of the seventh century, the Germans possessed organs, and were able to construct and play upon them; but it is not known how they became possessed of the art; and about the time of the introduction of the organ into churches and chapels, the Gregorian chant or plain-song, began to be organized for voices, in the manner which was afterwards called *discant*; which, in the infancy of counterpoint, implied a double chant, or melody. This melody of singing was, at first, practised only with the organ, but it was soon after adopted for vocal performances only; and, from two voices, extended to three, four, &c. and the terms *triple*, *quadruple*, *motet*, *quintet*, began to be introduced, and applied to musical compositions.

In the life of Swithinus, written by Wolstan, a Benedictine monk of Winchester, we find a description of an organ, erected in the cathedral of that city, by Elfeg, the bishop, in 951. He says, this instrument had twelve bellows above, and fourteen below; and that it requires seventy men to work it. It was played by two organists, and had ten keys, with forty pipes for each key. This was probably the largest organ of the period; and whilst on the continent that instrument was scarcely known, or very imperfect, in England it had already reached to considerable perfection.

Dancing, as well as music, seems to have accompanied the religious rites of the early Christians, as is evident from the following passage in a sermon of St. Augustine. "It is better to dig or to plough on the Lord's day, than to dance. Instead of singing psalms to the lyre or psaltery, as virgins and matrons were wont to

do, they now waste their time in dancing, and even employ masters in that art." Father Menestrier observes, that the name of choir is still retained for that part of our cathedrals, where the canons and priests sing and perform the ceremonies of religion; and this name was originally derived from *choros*, a dance, or a company of dancers.

Subsequent to St. Gregory, many changes were made in the notation of the ecclesiastical chants, though not in their structure.—Points and accents, and various marks were adopted, to denote the elevation or depression of the voice. In the tenth century, lines were used,—they were eight or nine in number; and the syllables of the psalm or hymn were written between them, according to the notes to which each syllable corresponded. Their place on these lines was denoted by an alphabetical letter placed at the beginning of each; capitals for the grave sounds, and small letters for the acute. Sometimes the notes were written over the words, and connected with the latter by ligatures. All these different modes, together with a variety of arbitrary characters, are to be found in the missals of the early ages of the church; *i. e.* from the sixth to the tenth century. The attempt to decipher many of them would be like an attempt to make out an unknown language, without being acquainted either with the powers and sounds of the alphabet, or the rules of its grammar.

The system of church music in Rome made its way into most of the countries where the Christian religion was professed. "The schism," says Dr. Burney, "between the Greek and Latin churches, which happened in the ninth century, prevented such changes, as were adopted in the Roman ritual after that period, from being adopted by the former; and the notation used before seems long to have been continued in the Greek church. In Russia, however, all the rituals were called in at the beginning of the sixteenth century; and a uniform liturgy was established, in which the modern method of writing music was received. But in the Greek isles, a notation peculiar to their inhabitants is still in use, which is not only as different from ours as their alphabet, but totally unlike that in the ancient missals." St. John Damascenus, who lived in the eighth century, is said to have reformed the chants in the Greek church, as St. Gregory did in the Roman: and some writers tell us, that he invented new characters for notation, which he accommodated to the Greek ecclesiastical tones; and that these characters did not, like ours, express merely single sounds, but all the intervals used in melody; as a semi-tone, tone, third major, third minor, &c. ascending and descending, with their different duration.

Such is the best account we have of the introduction of music into the church; and in this state it continued for several centuries.

THE
JOURNAL OF HEALTH,
AND
RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, APRIL, 1833.

[No. 8.]

OBJECTIONS TO INOCULATION FOR SMALL POX.

It has been asked why it is that physicians object to inoculate for the small pox in those cases in which parents request it to be done? The answer is simple and conclusive; because, namely, they believe they would be committing a very serious misdemeanour were they by inoculation to introduce among a community a disease by which the lives and happiness of so large a number of their fellow creatures would be jeopardised. They object to inoculate for small pox—

1st. Because it would endanger the spreading, sooner or later, of a destructive and loathsome disease, and thus occasion an immense sacrifice of human life among the unprotected.

2dly. Because, that even in those cases in which an attack of small pox does not absolutely destroy life, diseases of the eye ending in blindness; the development of scrofulous diseases in all their miserable forms; the disfigurement of pits, and seams and scars; and the extreme of bodily suffering, so commonly result wherever the contagion extends.

From the practice of inoculation no possible advantage can be derived to counterbalance the least of those tremendous evils of which it could not fail to be the cause.

The practice of vaccination on the other hand, unlike inoculation for small pox, entails no dangers on those who are unwise enough to reject it. It protects effectually the individual from the small pox, and places him in a situation of *greater security* than one who has been inoculated. For let it be recollected that severe and dangerous, nay, even fatal cases of small pox are known to occur and that frequently after inoculation, and marked by a degree of severity far beyond what the disease has been noticed to assume when it has occurred after vaccination. Vaccination does not make

the individual in whom it is practiced the vehicle of disease and death or deformity to those who surround him, and who are, in a melancholy number of instances, the persons most dear to him.—Let inoculation for the small pox be practised when demanded by the ignorance and caprice of parents, and numerous foci of infection are created—disease is made to hover over a neighbourhood; in consequence children will still continue to enter the world and to draw their first breath amid an atmosphere tainted by disease, with scarce a chance for escape—or if they do escape during the first period of infancy, will pass every after year of their existence in danger. When attacked, life will not it is true in every instance be destroyed: after weeks of suffering from a loathsome disease, recovery may take place; but in too many cases with the loss of sight—or with faces disfigured by seams, and pits, and wrinkles; causing the unhappy sufferers to become objects of pity and commiseration to the humane part of their fellow creatures, and to the thoughtless not unfrequently of ridicule and ill concealed disgust. Let the thinking friend of his fellow creatures, and the affectionate parent of a smiling, healthy, happy family, portray to themselves such a state of things and they will no longer ask the physician to be the means of introducing the evil amongst us.

But the dangers to be apprehended from small pox are not merely death and deformity, it often calls into existence in the constitution which has experienced its visitation, other painful and incurable maladies. The development of scrofulous diseases and of consumption, running their course to a fatal termination with the greatest rapidity—of diseases of the joints, terminating a miserable existence after years of pain and suffering; or leaving the unfortunate patients crippled and deformed, and a burthen to all about them, in consequence of a total destruction and immobility of the joints—these are some of the results to be anticipated from the introduction of small pox among a community by inoculation, and almost with certainty, for they formerly occurred from time to time in a great majority of the cases where the disease had been severe. Nor are they of uncommon occurrence where no traces of a disposition to disease is discernable in the parents, and it would actually seem that the contagion of small pox when defeated in its first object, the destruction of life, has the power of conjuring up other evils of minor but not of less active malignity to its assistance.—Thousands have been swept off or crippled by scrofulous diseases of the joints and throat after years of suffering, and thousands have died far more rapidly from consumption, who might have passed, but for small pox, through a life of reasonable duration, with as much happiness as commonly falls to the lot of our kind. The poor in general are those most liable to suffer from the baneful effects of small pox; blindness, lameness or chronic disease, incapacitating them from gaining their own livelihood, they are either reduced to a state of beggary, or become a burthen upon some public charity. Nevertheless, the same effects in different degrees take place among those in more comfortable situations and who have the advantage of the best medical assistance as well as among the poor.

This race of unfortunate sufferers from small pox has now almost become extinct; the common course of nature has removed them one by one, and from the joint effects of improved medical science, and the shield which *vaccination* has thrown over mankind, the chasm in their ranks has, it is to be hoped, ceased to be filled up for ever. The misery of their lot in this state of existence, prevents our wishing them still here, but were it otherwise, they might afford a lesson to the thoughtless, the ignorant, and the prejudiced opponents of vaccination, much to be desired.

ESTIMATION OF THE FEMALE CHARACTER BY THE ANCIENTS.

By the ancients, especially the Greeks and Romans, the female character was held generally in the most sovereign contempt, hence we find that by the writers of those nations, epithets are applied to women in the highest degree opprobrious or degrading. The female character never in fact acquired its due weight and estimation, until subsequent to the establishment of Christianity, to which it is almost entirely indebted for the consideration which it now enjoys.

Hesiod, the most ancient of the Greek poets, derives the whole race of women from that "fair mischief," which Vulcan formed at the command of Jupiter, and which was endowed by Mercury, "with lies, and weeding words, and guileful manners,"—and he does not scruple to say, that though a man should even meet with a virtuous and prudent partner, the *evil* overbalances the *good*.

Simonides has a poem which treats solely of women, whose souls, he supposes, are formed by the gods "out of those seeds and principles which compose several kinds of animals and elements."—The swine, the fox, the dog, the ass, the cat, and the ape, are the animals from which he selects the ingredients, of which six different kinds of women were composed. The earth and the tempest furnished, according to his hypothesis, two other species of female souls; and it is remarkable, that the solitary instance of compliment bestowed by him, in his poem, upon the sex, is in supposing the souls of one of his ten kinds of women to have been made from the elements of the bee, an insect, remarkable, it is true, for its industry and prudence, but still an insect, and therefore, conveying but a very poor and contemptible idea of female excellence. This poem is to be found at large in Brunk's *Analecta*, vol. i. p. 124.

But perhaps the most decisive testimony of the degrading notions entertained by the heathens of the female character, is that which Professor Robinson has produced from the famous speech of Metellus Numidicus to the Roman people, when, as censor, he was recommending marriage. The occasion required that he should extol the female character, and its beneficial influence as highly as the general opinion would bear; yet, the following appears to be the best and strongest argument he could find to persuade the people to marry. "If, Romans, we could do without wives, we would

all spare ourselves that vexation; but since such is the law of nature, that though comfortless with them, yet without them life cannot be supported; we should rather consult permanent utility than merely our own comfort." Nor was this sentiment peculiar to the Romans, for we meet with it more briefly expressed by the poet Menander. "Marriage if any one rightly considers it, is indeed an evil, but an evil that is necessary." Eubulus says a man may be excused for marrying once, but "may he come to an evil end," if he venture on it a second time.

But it is not only when expressly speaking of the sex, that the ancients discover the low estimation in which they held it; even when they are treating on other subjects, wherein the human race is in any degree concerned, they cannot help making it appear that they consider females to be an inferior order of beings. Even Virgil, who very rarely, in express terms, says any thing disrespectful of women, when describing the Elysian fields, does not make mention of a single female in that heathen paradise. Caicinus speaking of a female says, "you need not abuse her; it is sufficient to know that she is a woman."

The customs of the ancients were in close conformity with the language they held, and most decidedly prove, that it was not to vent their spleen, or from a fondness for raillery, that they indulged themselves in speaking so disrespectfully of the sex; but that it was a settled principle among them that women were a necessary evil. It was the national practice of Greece, that women should bring large portions with them to their husbands. "Money," remarks Bishop Potter, "was the chief tie of their affections; and they matched more for the sake of that, than other commendable qualities."* Conformably to this, Medea is made by Euripides to complain, that women were the most miserable of all rational creatures, because lying under a necessity of purchasing their masters at a dear rate. And, in his Hippolytus, he advances it as a proof how great an evil women are, "that their fathers, to whom they owed their lives and education, adding a dowry, send them into the house of another, that they themselves may be rid of an evil."

The occasional panegyrics which the ancients have bestowed upon the female character, are with few exceptions, almost as degrading and insulting as their direct abuse. Scarcely one of them can be found, who placed a proper value on the sex. Plato seems to have approached the nearest to the Christian estimate of female excellence, than any other of the heathen writers.

THE NOSE, EYES AND MOUTH.

The nose, eyes and mouth are the three features which tend most to embellish the human countenance.

The nose distinguishes man from brutes, and is supposed by many to be a general index of the characters of men. But the nose

* Grecian Antiquities, book iv. chap. xi. p. 276.

is not of much account after all. Its use consists chiefly in its being the sentry box where the sense of smell holds its watch over that of taste, to give alarm to the latter upon the approach of whatever may offend. Fashion and custom have, however, perverted it in a great degree from this its original destination, so that it has now but very little use with one class of mankind than as a receptacle of snuff, and with another, to indicate by its curl the pride of the professed beauty or the contempt with which arrogance looks down upon all who are placed lower than them in the scale of fortune's favours. The organ of smell is in truth the medium of but little pleasant sensation to the brain—there is but little sentiment to be extracted from an evanescent odour, however fragrant. It is, poor thing! destined to suffer much annoyance, as it cannot close itself against the entrance of that which it abhors.

The eye, however, is the inlet of all that is beautiful in nature. It is the loop hole of our earthly castle, out of which the soul delights to look on the broad domains which surround it. In physiognomy, the eye is unquestionably one of the most important indices of the inward workings of the mind. It expresses all the strong and powerful emotions of the soul, equally with its softer and more minute operations. As a feature it is filled in the great and good, with honor and with love.—How sublime is man who possesses the eye of Mars, in the front of Jove—how lovely is woman, with a blue and liquid eye, melting beneath a falling eye-lash. How interesting is she when this blue eye is dimmed with the tear drops excited by another's woe; and holy are those tears, when seen through others which compassion has started in our own.

What mortal pencil can the eye depict,
The fire it's lit with, is the fire of Heaven.

But how shall we speak of the mouth? How trace the ever variable outline of the lips? How shall we follow the thousand evanescent motions that play about it? How bewitching is it, at the starting of a smile; how lovely is it, as it gathers to close upon it! How pure is it, when just opening with sorrow; how tremulous under the touches of pity! In joy how expressive; in love how melting. How much does it exceed all else that nature can do! How supreme is it over art! How much more brilliant is it "than coral inlaid with pearls."

BELL ON MANUAL LABOUR IN LITERARY INSTITUTIONS.

We derive the following from the *First Annual Report of the Society for Promoting Manual Labour in Literary Institutions, including the Report of their general agent, Theodore D. Weld, 1833*. The agent, Mr. Weld, introduces the extract by some remarks, stating the author of the communication to be Dr. John Bell, *Editor of the Journal of Health*. Dr. Bell is one of the Editors.

Dr. Condie is also quoted in the Report—but by an oversight he is not mentioned as also *one* of the Editors of the Journal.

“Hitherto I have limited myself to speak of agricultural and mechanical labour in connexion with health; but if their importance as a branch or part of education were the question, the inquiry would take a wider, and if possible, a still more satisfactory range. Omit practical agriculture and mechanics in a system of education, and every reflecting man must pronounce it incomplete and defective, whether as regards bodily health, or mental resources. Employment in the field or the workshop, alternating with the common scholastic exercises in school and college, would be a relaxation from the studies purely intellectual, and not a labour. The mind would still be acquiring ideas, and those of the most enduring kind; since they are the effect of impressions made by the objects themselves, and not by written or verbal descriptions. Habits of attention would be formed, and a love of observation of the phenomena exhibited by external nature, and of the gradual and wonderful mutations accomplished by art, would be a strong and ruling passion. His body, accustomed to active and vigorous effort at the suggestion of the mind, a person feels more confidence in his own resources; is prompt and ready in moments of difficulty or danger; and whether on sea or shore, in the crowded haunts of men, or in lonely travel, he has means of extricating himself from imminent peril, which others, differently educated, would never think of, or, if knowing, want the energy and presence of mind to turn them to account. The addition of agriculture and mechanical employment to theoretical learning cannot but enrich the mind with a large stock of ideas and energy, and enable it to indulge in new and varied combinations of known facts and opinions, and afford it much greater facilities for striking out fresh paths for investigation and discovery.

However much we may admit the original or innate differences among men, in regard to their aptitude for acquiring knowledge, and shining as inventive geniuses, (and few will carry the belief farther than I do) we must still, it seems to me, confess that unless materials be furnished from the external world for the mind to work on, its displays will be obscure, unsatisfactory and unprofitable.—The poet, the orator, and the more professed moral teacher, will be successful, not alone in proportion to the innate strength of their intellectual faculties, including imagination, but to the extent of their communings with men, and *their long and varied observations of things*. Without these, all the knowledge obtained from books; all the research and deep study within college walls; all the recitations and exercises after the most approved rules of the most learned pedagogue, will not enable a man to teach and counsel his fellow men with success; to enlist their sympathies for whatever is great, noble, and good, in real or fictitious life; to charm them with the magic creations of the pencil and chisel; or, in fine, to make them wiser, better, and happier. This assertion may seem at first view to be hazarded rather as expressing an inference deduced from the

theoretical promises already advanced, than the reality of the annals of literature, and the history of genius. I am content to change the mode of argument, and to rest our cause on the result of an appeal to these latter sources. If I mistake not, we shall find that a *life of adventure, hardships* encountered on sea and shore, long and fatiguing travel, *mechanical and agricultural employment*, and field sports and athletic exercises, and even the turmoil of a camp, however much most of them were severally regarded at the time as vexatious interruptions to study and the cultivation of genius, they were in fact main contributing causes of the success and renown of many of the most distinguished names in arts, science, and letters. Foremost in the list, among the worthies of our own country, is Franklin, whose very necessities, and employment as a journeyman printer, by making him a slower reader of books, made him more thoroughly imbued with what he did read, and whose mode of life, and early associations, gave his mind a practical as well as an inquiring turn, and compelled him to a slow and gradual development of his powers, and corresponding discoveries, which it is very doubtful would ever have been obtained in the continued sunshine of prosperity, and in the enjoyment of *gentlemanly and scholastic leisure*. He was eminently the working man and student, the printer, and the philosopher.

The two Stephensens, father and son, were both of them among the best and most *laborious printers*, and the *most learned men of their age*. 'The first, or Robert, author of the great Thesaurus of the Latin language, did more,' says De Thou, 'to immortalize the reign of Francis I., than all the monarch's own most famous exploits.' Henry Stephens, the son, was one of the *most learned men that ever lived*; and although toiling in a *laborious occupation*, under the pressure of misfortune and penury, and often wandering about in quest of mere subsistence, he was so voluminous an author, that if he had spent his whole life in writing books, he would have left enough for us to admire in his industry and fertility of mind. His Thesaurus of the Greek language, the fruit of twelve years laborious application, is well known to the learned.

Brindley, the celebrated engineer, was till near the age of manhood a *carter* and *ploughman*, afterward a *millwright*, in which employment his mind was trained for the grander exhibitions of inventive genius in superintending the construction of the Bridgewater canal, with its tunnels, aqueducts, and locks.

Watt, as mathematical instrument maker and general engineer, was placed in the path of discovery the more easily and successfully, by his combining with practical science the study of its theory.—His steam engine, if not the unavoidable, was at least a natural result of his frame of mind, and mechanical pursuits, despite the obstructions interposed by delicate health and not unfrequent sickness.

Bewick, the celebrated *engraver on wood*, and author of the History of Quadrupeds, delighted from his earliest years in observing the habits of animals; and it was this fondness, which could only

have been indulged in the freedom of a country life, that gave rise to his first attempts at drawing. He ever continued to be fond of all the manly and invigorating sports of the country.

Ferguson, while yet a shepherd and farm servant, was a student of astronomy. His first attention to mechanics, when only seven or eight years of age, was from witnessing the employment of a beam resting on a prop, to raise part of the roof of his father's cottage, which had fallen in.

Not dissimilar to this was the early life of our own Rittenhouse, who, when a young man, used to draw geometrical diagrams on his plough, and study them as he turned up the furrow.

The advantages of early difficulties, and obstacles to study, are, it seems to me, forcibly shown in the case of Sir Humphrey Davy. With his strong natural vanity, and dash of coxcombry, and love of show, it is not likely, had he been the son of a gentleman in affluent circumstances, in place of that of a poor *wood carver*, and an apprentice to an apothecary in a small town, that he would have displayed that early love of science, and perseverance in experimenting, which made him eventually the most brilliant discoverer in chemical science of his day.

Many of the best historians were men who travelled much, or had been themselves busy actors in the scenes and events which they describe. The names of Herodotus, Thucydides, Xenophon, Polybius, Diodorus Siculus, Julius Cæsar, Froissart, Philip de Comines, Sir Walter Raleigh, Frederick the Great, De Thou, Clarendon, occur to me at the moment, in support of this position.

In continued toil, and often imminent peril, while leading the life of a *seaman*, Columbus rendered himself the most accomplished geographer and astronomer of his age, and kept up that acquaintance, which he had begun at school, with the different branches of elegant literature. It was at sea, too, that Cook acquired for himself those high scientific, and it may be added literary accomplishments, of which he showed himself to be possessed. Lord Collingwood was only thirteen when he entered the navy, and during the remainder of his life he was on shore but very short and few periods; and yet, as is evident from his correspondence published since his death, he writes, in an admirable style, and proves himself to have been a man of varied literary attainments.

Of the successful union of mercantile business with literature and philosophy, we have instances in the first Cosmo de Medici, Gugo, Ricardo, and others.

(*To be continued.*)

Cholera in the Arch Street Prison and Philadelphia Alms House, &c.—We continue to give extracts from the Report of the Committee on the Causes of Cholera in the Arch Street Prison, and the regulations affecting the condition of debtors and untried prisoners.

The total number of commitments to the Arch street jail, in 1829, was 3017, of which only five persons died in prison. The total

number of commitments in 1830, was 3932; total of diseases relieved or cured, 751, and 5 deaths. The total number of deaths in 1831, was 15, an amount unusually large, occasioned principally by typhus and bilious fevers. The chief keeper informed the committee, that for 7 years the deaths had not exceeded that number, and that the average was not so high as 10 or 12 per annum. The total number of commitments in 1831, was 4506, of which 2503 were charged with being disorderly, idle, and disturbers of the peace, or were convicted as vagrants, or for profane swearing and intoxication. Of the remainder, 1187 were for assault and battery, for keeping tippling houses, and similar charges, while 816 were confined upon charges of burglary, larceny, passing counterfeit money, and other offences punished by fine and imprisonment to hard labour. In 1832, the total number of commitments amounted to 4515. It appears that the largest number are usually sent into the Arch street jail *during the summer months*.

According to the report made to the Consulting Medical Board of Philadelphia, by Dr. Samuel Jackson, "the commencement and progress of the cholera were in the character of a wide spread epidemic, suddenly invading an extensive district, indicating the existence of an active epidemic influence or agency, operating at once on the mass of the population. In almost every case, the disease was called into existence by some exciting cause, *most commonly error in diet*." The committee are assured, that in the Eastern penitentiary, during the prevalence of the cholera in Philadelphia, many, perhaps all the prisoners, 97 in number, were affected with bowel complaints, some severely. Great and unusual care was exercised, as to their diet and cleanliness, and no case of epidemic cholera occurred within the walls. The prisoners were entirely ignorant of the existence of the cholera in the city, *and are so yet!* The daily rations of the convicts in the Eastern penitentiary, are, for breakfast, 1 pound of bread, made of $\frac{2}{3}$ rye and $\frac{1}{3}$ Indian meal, and 1 pint of coffee with milk and sugar, or molasses; for dinner, $\frac{3}{4}$ of a pound of beef without bone, one pint of soup made of the beef, and one pound of potatoes; at supper, 1 pint of Indian mush, and $\frac{1}{2}$ a gill of molasses. The molasses is given monthly, and the prisoners use it at pleasure. They receive as many potatoes at dinner as they want, and as much mush as they ask for at supper. Particular attention is paid to the cleanliness of the person and clothing—of the cells and bedding. When sick, the diet of the prisoners is varied, according to the direction of their physician, who attends regularly.

In the Walnut street prison, where about 400 convicts* were confined, but one case of epidemic cholera was reported. This was a prisoner of worn out constitution. He had been confined for 5 years, and for the last three was in a state verging on death, from the effects of previous excessive intemperance. He swallowed

* There were confined in Walnut street, when the committee visited the prison, 310 men, 54 women, and 45 boys—total 409.

about 4 oz. of spirits of turpentine, (which had been given by order of the physician, as an external application,) on account of its stimulating effects, and died, in spasms, 6 hours after. The prisoners confined in the Walnut street jail, have ordinarily each $1\frac{1}{4}$ pound of bread, and $\frac{1}{2}$ a pound of meat daily, besides soup, potatoes or rice, mush and molasses. No great variety of food is usual in the different seasons, except that there is generally a larger supply of vegetables in the summer. During the last summer, however, being thought objectionable, they were interdicted, and the quality of the bread, "both in material and manufacture," was improved. Molasses and water was denied the prisoners, and several additional sleeping rooms were opened for their use. While the cholera prevailed in the city, affections of the stomach and bowels, as diarrhœa, dysentery, and ordinary cholera of a severe character, became much more prevalent in the Walnut street prison, than the attendant physician, Dr. Bache, had ever seen among the prisoners, "shewing the operations of the same mysterious cause which was affecting the citizens at large," and which only required a highly susceptible condition of the prisoners to render it capable of producing the genuine epidemic among them.

In the house of refuge, where a large number of children were confined, with a sufficient quantity of proper food, and among whom cleanliness, occupation and instruction, are suitably attended to, there was no case of epidemic cholera.

In the Pennsylvania Hospital, before the cholera occurred, vegetable diet was greatly restricted; none but potatoes and rice were given, and no fruit was allowed, as has been usual: Molasses was ordered to be omitted, and the patients were dressed more warmly. To those on a low diet, for the treatment of insanity, broth was given, and purgative and emetic medicines were suspended in general practice. The prevalence of diarrhœa was also noticed, during this period, among the patients in the hospital, and principally among the lunatics, whose condition rendered them less able to appreciate the necessity of precautions. Among a population exceeding 100, there were but 6 cases of epidemic cholera, which presented themselves in separate and distinct portions of a very extensive range of buildings, between the 9th and the 14th of August: two of these cases died—all were insane or idiotic.

In the Philadelphia Alms House, where the character and habits of the greater part of the inmates are depraved by excesses and disease, there were 193 cases of epidemic cholera, 89 of which proved fatal. The first case occurred on the 25th July; the cholera ceased on the 23d August.—It was chiefly confined to aged persons and the intemperate—several idiots and lunatics were also its victims. Those who recovered, the physicians state, were not in the collapsed stage of the disease, except three persons. The character of those who died, was that common to most of the inmates of the house,—who are 80 out of 100—intemperate. Many of them had laboured under various diseases for several years.

When the committee visited the Alms House, there were in that institution,

	Men.	Women.	Children.	Total.
White,	559	408	34	1001
Colored,	69	55	15	139
	<hr/> 628	<hr/> 463	<hr/> 49	<hr/> 1140

For six months in the year there are about 600 medical and surgical patients in the alms house, each month; for the rest of the year, about 400 each month. *A majority are natives of foreign countries.* The men are generally laborers, and of various trades. The committee cannot refrain from offering a tribute of respect to those excellent "Sisters of Charity" who, under the protection of their simple habits and kind hearts, so freely exposed themselves, during the prevalence of the cholera in the alms house, for the relief of the destitute and the diseased who suffered there. These ladies, who came to the assistance of the guardians of the poor from a sister state, made very little change in their manner of life, in anticipation of the severe duties they voluntarily undertook to perform. On Fridays and Saturdays, however, as on other days of the week, they ate meat, contrary to the practice of those who strictly conform to the rules of the Catholic church, which upon this occasion were wisely suspended by the Episcopal authority of the district. They refrained from fruits and vegetables, by the advice of physicians; but they employed no wine or preventive medicines. If possible, they retired to rest at 9 o'clock, their accustomed hour, and rose at half past four in the morning to attend the sick. They were directed to wear a flannel dress, but did not do so until after the cholera had subsided. One, only, had slight symptoms of the disease, which were readily relieved.

It was remarked to the committee, during their investigations, that the *sudden* increase of food which was given after the cholera had begun, and which was eagerly devoured by the prisoners, may have assisted the excessive fatality of the epidemic in the Arch street jail, on the 4th and 5th of August. But in looking over a statement of the number of persons attacked by the disease in Philadelphia and the Liberties, from the 27th July until the 22d of August, we are struck with the fact of the *very rapid increase* of cases and of deaths, wherever the disease occurred or was treated. Thus, on the 1st of August there were 21 cases and 8 deaths reported: on the 2d, that number was *nearly doubled*; there were 40 cases and 15 deaths. The greatest number of cases reported to have occurred in private dwellings in one day, (viz: 94) appeared on the 9th and 13th of August; while on the 8th there were but 43, and on the 12th, 66 in similar situations. The greatest number in the cholera hospitals, was 86, on the 6th of August; on the 5th, there were only 28 in these hospitals.

The largest number in the alms house, (viz: 35) were found there on the 8th of August: on the 7th but 17 cases. The greatest

number in the Arch street prison, reported on one day as new cases, (viz. 45) were on the 6th of August: on the 4th, there were only 9 new cases reported in that jail. The largest total number of cases, (viz: 176) is noticed on the 6th of August: on the 5th, the total amount was 66: and the greatest number of deaths, (viz: 73) is stated on the 7th of August; while on the 5th there were but 26 deaths in the city and liberties. We suppose these reports to have generally been made one or two days after the deaths. Thus it will be seen that the number of cases or of deaths, in all the different locations and practice, was generally less than one half, only a day or two preceding the dates set down for the greatest mortality. So that whatever effect may be justly attributed to the improved diet of the prisoners, it would seem that a *very sudden* increase of the number of deaths was universal, wherever the disease prevailed.

The committee, besides the observations they have already made upon the crowded condition of the prison and the character of the food afforded to the prisoners during this precarious season, must remark, that the very high wall which surrounds the apartments in which they are confined, prevented ventilation. The privy, which almost adjoins the men's day room, was thought very offensive, notwithstanding the efforts made to purify it. Some foetid sheep skins and hair, in small amount, were found in the basement story, upon examination after the cholera; and the clothing was deficient, as great demand for flannel dresses was made by the attendant physicians, after the epidemic had ceased, which were liberally supplied by the prison society. The prison was otherwise well cleansed before the distemperature ensued.

THE NERVOUS FEMALE.

The following remarks which we have translated from the French of a celebrated female writer contain a great deal of truth; and allowance being made for those particulars in which the characters of the French and American ladies differ from each other; which difference was more striking however at the period when this sketch was written than now, our readers of the female sex may derive from it a very useful lesson. The extract forms a scene in a moral tale.—

Henry was constant in his attendance at the house of Madame Valmere. The latter having made him her confidant, he soon discovered that she was far from being happy—notwithstanding her ample fortune, the amiability of her husband, her charming children and a circle of relations and friends whom she respected and admired. But her health was bad; pleasure no longer amused her, and the visits of her friends were to her only a source of fatigue. She was unable to pass her hours pleasantly at home, and she had neither the strength nor the desire to go abroad, her duties even became a burden to her. Henry uneasy at the state of languor and depression in which Madame Valmere had sunk, consulted privately her physician. She is, replied the latter, in a *crisis* which may yet endure for some time. 'In a what?' exclaimed Henry. I

will explain myself replied the doctor; The females of Paris follow a mode of life, particularly from their fifteenth year, which tends necessarily to produce in them the same sufferings which Madame Valmere now experiences. Dancing parties, sleighing parties, and the abuse of tea, cause the destruction of a considerable number of them in early youth. But, remarked Henry, dancing is certainly an exercise as healthful as it is agreeable! That is true, replied the physician, when used in moderation. In all things excess is injurious and destructive to health. If it be beneficial to dance in the country, in the open air, and at a proper season, this cannot be the case when the dance is prolonged for the greater part of the night in a crowded and lighted apartment where the air is impure and stifling. And what have you, doctor, to say against sleighing? That it is an exercise which may be beneficial to females who pass their lives in the country. Why so? Because they are accustomed to exercise daily in the open air, on foot, and in consequence suffer less from the vicissitudes of the weather. While the better class of females in the city are either shut up almost constantly in their apartments, kept always of an equal temperature, or when they do go abroad, enclose themselves in a carriage and permit not a breath of air to blow upon them. Besides, the parties for sleighing in the country are never so brilliant but that one may decline them, if not in perfect health, whilst in the capital, from the moment a party of this kind is made up, there is scarcely a young person who would disappoint herself of the anticipated pleasure, even though labouring under a cold or other *slight* indisposition. The party sets off and the poor girl returns with her cold considerably augmented. This is still too often neglected for the pleasures of a new excursion, and she is at length confined to her bed with a serious disease of the chest. Thus, for the satisfaction of having traversed the principal streets of Paris shivering with cold, the eyes filled with tears, and the countenance of a purple hue, amid the discordant sound of a thousand bells, the noise of which scarcely permits any conversation between the individuals of the party, she risks the destruction of her health, perhaps of her life. In regard to tea, its constant and excessive use is generally acknowledged to be highly injurious. Females seem to live upon tea, cream, coffee, cakes and sweetmeats, why should it therefore astonish any one that the health of their stomachs is impaired, their powers of digestion very generally destroyed, their frames debilitated, and that they should be sufferers from various nervous complaints. In this manner it is that their youth and beauty so early vanish. At twenty-five or twenty-six years of age their constitutions commence very sensibly to decay, and a very large number sink at this period into their graves. At any rate, fashionable life must now be abandoned; dancing and pleasure are at the best a fatigue—the night can no longer be turned into day. If the powers of life are not too far exhausted, repose and moderation will re-establish the health, if there be good sense enough to direct this prudent course. Now sir, you can understand, why the period of

twenty-six years is so dangerous for the females of Paris. Madame Valmere is now thirty-six, she is nevertheless at a period of life extremely critical. But on what account, Doctor? Her's is an age at which persons of the least degree of reflection are ordinarily disgusted with the frivolities which the world presents to them as solid pleasures. Impaired health, disgust, ennui and idleness produce depression of spirits and a series of nervous symptoms more or less serious. The female thus afflicted shuts herself up at home; every thing irritates and offends her—without taste for reading and with a mind but little cultivated, life itself becomes a burden. A minute attention to the state of her health—to converse of and enumerate her morbid sensations to every individual that comes near her; the visits of her physician and a daily change of remedies constitute her only pleasure—her entire occupation. In fine, many who can no longer shine in the circles of youth and of beauty—who can no longer command the attention and the admiration of the world of fashion, by their charms, endeavour to interest it, by exhibiting all the symptoms of impaired health. They in consequence affect to keep their chambers, by passing a part of the day in solitude. But this state of things cannot last long; it is absolutely necessary to be healed at last, or to continue for the remainder of their lives valetudinarians. What resource is left them? Balls, assemblies, parties—no longer present any attraction. There are several modes by the adoption of which health and cheerfulness may be again restored.—But which to choose is the difficulty. They all demand exertion of body, and sacrifice of vitiated tastes and long cherished indulgencies. Madame Valmere is in this state of hesitancy—her good sense points out to her the proper choice, but her habitual indolence and her depression of spirits prevent her from at once making it—in the mean time she suffers both in mind and body—and until she summons to her aid sufficient resolution to change her daily habits, she will be an ailing, melancholy woman. But Doctor it seems to me that considering the nature of her complaints, she might very well dispense with the various medicines which you are in the habit of prescribing for her! You mistake my young friend—I am persuaded that Madame Valmere is not a proper subject for internal remedies—exercise, cheerful occupation of mind, and a well regulated diet can alone restore her health. But then she is of a different opinion, she believes she is dying—that medicines will aid her, and the morbid state of her mind is such that I dare not oppose her hypochondriacal illusions beyond a certain point. The medicines which I give her are sufficient to amuse her, but I am careful that they are not active. But why not quit her? That would be to inflict upon her a serious injury—she would fly then to the Empiric—and in place of my placebos, while taking which she is willing to a certain extent to adopt a proper regimen, she would be satisfied with merely swallowing nostrum after nostrum, thus constantly aggravating her complaints as well by the active ingredients which they so generally contain, as by the errors in diet and regimen from which she then would have no judicious

councillor cautiously to guard her. Though I am unable to do all I could desire for your friend, yet in continuing my attendance upon her, I know that I am still of use to her.

CASPAR HAUSER.

The surprise of Caspar Hauser's first appearance soon settled down into the form of a dark and horrid enigma, to explain which various conjectures were resorted to. By no means an idiot or a madman, he was so mild, so obedient and so good-natured, that no one could be tempted to regard this stranger as a savage, or as a child grown up among the wild beasts of the forest. And yet he was so entirely destitute of words and conceptions, he was so totally unacquainted with the most common objects and daily occurrences of nature, and he showed so great an indifference, nay, such an abhorrence, to all the usual customs, conveniences, and necessities of life; and at the same time he evinced such extraordinary peculiarities in all the characteristics of his mental, moral and physical existence, as seemed to leave us no other choice, than either to regard him as the inhabitant of some other planet, miraculously transferred to the earth, or as one who, (like the man whom Plato supposes) had been born and bred under ground, and who, now that he had arrived to the age of maturity, had for the first time ascended to the surface of the earth and beheld the light of the sun.

Caspar showed continually the greatest aversion to all kinds of meat and drink, excepting dry bread and water. Without swallowing or even tasting them, the very smell of most kinds of our common food was sufficient to make him shudder or to affect him still more disagreeably. The least drop of wine, of coffee, or the like, mixed clandestinely with his water, occasioned him cold sweats, or caused him to be seized with vomiting or violent headache.*

A certain person made, somewhere, the attempt to force some brandy upon him on pretence that it was water; scarcely had the glass been brought to his lips, when he turned pale, sank down, and would have fallen backward against a glass door, if he had not been instantly supported.—Once when the prison keeper had prevailed upon him to take some coffee in his mouth, although he could scarcely have swallowed a single drop of it, his bowels were in consequence thereof repeatedly affected.—A few drops of beer

* It is much to be regretted that in the whole city of Nuremberg not a single individual was to be found who possessed scientific curiosity sufficient to induce him to make this person the subject of physiological inquiries. Even the chemical analysis of the saliva, or other substances ejected by this young man, who had been solely fed on bread and water, might alone have furnished many not unimportant scientific results; which results would at the same time have verified, as it were with intuitive certainty, the highly important juridical fact that Caspar had been really fed on nothing but bread and water. But at the time when the judicial authorities, after many fruitless endeavours on their part, were at length placed in a proper situation to engage in the examination of Hauser's case, every opportunity of making amends for what had been lost by such omissions had long passed by.

made of malted-wheat, though much diluted with water, gave him a violent pain in his stomach, accompanied with so great a heat that he was all over dripping with perspiration; which was succeeded by an ague attended with headache and violent eructations.—Even milk, whether boiled or fresh, was unpalatable to him, and caused him disgusting eructations. Some meat was once concealed in his bread; he smelt it immediately, and expressed a great aversion to it, but he was nevertheless prevailed upon to eat it; and he felt afterwards extremely ill in consequence of having done so. During the night, which, with him, commenced regularly with the setting, and ended with the rising of the sun, he lay upon his straw bed; in the day time he sat upon the floor with his legs stretched out strait before him. When in the first days, he saw for the first time a lighted candle placed before him, he was delighted with the shining flame, and unsuspectingly put his fingers into it; but he soon drew it back, crying out and weeping. Feigned cuts and thrusts were made at him with a naked sabre, in order to try what might be their effect upon him; but he remained immoveable, without even winking; nor did he seem to harbour the least suspicion that any harm could thus be done to him.* When a looking-glass was once held before him, he caught at his own reflected image, and then looked behind it to find the person whom he supposed to be concealed there. Like a little child, he endeavoured to lay hold on every glittering object that he saw; and when he could not reach it, or when he was forbidden to touch it, he cried. Some days after his arrival, Caspar was conducted, under the escort of two police men, around the city, in order to discover whether he could recognise the gate through which he had entered. But, as might have been foreseen, he knew not how to distinguish the one from the other; and, upon the whole, he appeared to take no notice whatsoever of what was passing before his eyes. When objects were brought more than ordinarily near to him, he gazed at them with a stupid look, which, only in particular instances, was expressive of curiosity and astonishment. He was in possession of only two words which he occasionally used for the purpose of designating living creatures. Whatever appeared to him in a human form he called, without any distinction of sex or age, “bua;” and to every animal that he met with, whether quadruped or biped, dog, cat, goose, or fowl, he gave the name of “ross” (horse.) If such horses were *white* he appeared to be pleased; *black* animals were regarded by him with aversion and fear. A black hen, advancing towards him, once put him in great fear; he cried out, and though his feet refused to perform their office, he made every effort to run away from her.

Not only his mind, but many of his senses appeared at first to be in a state of torpor, and only gradually to open to the perception of external objects. It was not before the lapse of several days that

* It is even said that by way of an amusing experiment, a pistol or some other piece of fire arms was once discharged at him.

he began to notice the striking of the steeple clock, and the ringing of the bells. This threw him into the greatest astonishment, which at first was expressed only by his listening looks and by certain spasmodic motions of his countenance; but it was soon succeeded by a stare of benumbed meditation. Some weeks afterwards the nuptial procession of a peasant passed by the tower with a band of music close under his window. He suddenly stood listening, motionless as a statue; his countenance appeared to be transfigured, and his eyes as it were to radiate his ecstasy; his ears and eyes seemed continually to follow the movements of the sounds as they receded more and more; and they had long ceased to be audible, while he still continued immoveably fixed in a listening posture, as if unwilling to lose the last vibrations of these, to him, celestial notes, or as if his soul had followed them and left its body behind it, in torpid insensibility. Certainly not by way of making any very judicious trial of Caspar's musical taste, this being, whose extraordinary nervous excitability was already sufficiently apparent, was once, at a military parade, placed very near to the great regimental drum. He was so powerfully affected by its first sounds, as to be immediately thrown into convulsions which rendered his instantaneous removal necessary.

Among the many remarkable phenomena which appeared in Caspar's conduct, it was soon observed that the idea of *horses* and particularly of *wooden horses*, was one which in his eyes must have acquired no small degree of importance. The word "*Ross*" (*horse*) appeared in his dictionary, which contained scarcely half a dozen words, to fill the greatest space. This word he pronounced on the most diverse occasions, more frequently than any other, and often indeed with tears in his eyes, and with a plaintive, beseeching tone of voice, which seemed to express a longing for some particular horse. Whenever any trifle, as for instance a glittering coin, a ribbon, a little picture, &c., was given him, he cried: "*Ross! Ross!*" and notified by his looks and motions his wish to hang all these pretty things upon a horse. Caspar, who—not indeed to any great advantage of his mental development, or to the making of such accurate observations on his peculiarities as the rarity of such a phenomenon rendered desirable—was daily conducted to the guard room of the police, became there as it were domesticated, and gained the good will and affection of all its constant attendants.—The words "*Ross! Ross!*" which, also here, he so often repeated, suggested to one of the police soldiers, who had always taken the most notice of this singular amalgamation of adolescence and childhood, the idea of bringing him, at the guard room, a toy of a wooden horse. Caspar, who had hitherto on almost all occasions showed the greatest insensibility and indifference, and who generally seemed much dejected, appeared now to be as it were suddenly transformed, and conducted himself as if he had found in this little horse an old and long desired friend. Without noisy demonstration of joy, but with a countenance smiling in his tears, he immediately seated himself on the floor by the side of the horse, stroked it,

patted it, kept his eyes immoveably fixed upon it, and endeavoured to hang upon it all the variegated, glittering and tinkling trifles which the benevolence of those about him had presented to him. Only now that he could decorate his little horse with them, all these things appeared to have acquired their true value. When the hour arrived when he was to leave the police guard room, he endeavoured to lift up the horse, in order to take it along with him; and he wept bitterly when he found that his arms and legs were so weak that he could not lift his favourite over the door.* Whenever he afterwards returned to the guard room, he immediately placed himself on the floor by the side of his dear little horse, without paying the least attention to the people who were about him. "For hours together," said one of the police soldiers in the declaration which he afterwards made before the police court, "Caspar sat playing with his horse by the side of the stove, without attending in the least to anything that passed around him or by his side."

EMANATIONS.

The luxurious and unmeasured use of odours has not ceased with the Pagan era, nor in the Paphian temples; neither is it confined to the Zenana of the Eastern Odalisk; it is as much in vogue among ourselves, and in this country; and we therefore shall give a few, out of numberless examples of its pernicious, and sometimes fatal consequences. Our observations have already proved that perfumes are worse than needless auxiliaries to youth and beauty, and that they may add to the effervescence of early passion in those who are but little aware of the nature of the exotic charm—a charm the false prophet has not forgotten to place in his sensual Paradise, and poets in the bowers of Circe and Armida.

If smoking stramonium relieves asthma, and reclining on a pillow of hops produces sleep; on the other hand also, the occasionally pernicious effects of odoriferous bodies cannot be doubted. In a slighter degree it is seen in the fainting and head-ache produced by strongly perfumed flowers, in close rooms.

The unconscious apprentice of the chemist, when first pounding rhubarb and hellebore, learns by *experience* the properties of these drugs; their volatilized aroma acting on him as effectually as if he had swallowed a portion of their substance. Snuff-takers, persons whose olfactory organs are rendered less sensitive by the constant use of a pungent plant, are frequently distressed by nausea, if some new perfume be added to their snuff. We may conceive the effect that pungent odours must have on the susceptible nerves of the refined and sensitive, when we see the fury they produce in brute animals: it has happened sometimes in cattle fairs, that mischievous

* He was for a long time afterwards, extremely weak in his arms as well as in his feet. It was not before the month of September, 1828, after he had already commenced to eat meat, that his strength was, by continued exercise, so far increased, as to enable him to lift twenty-five pounds with both his hands a little from the ground.

persons have scattered into the air pungent powders, by which the animals collected for sale were made so furious, that they have broken down all barriers, and escaped, after overthrowing in their mad career, men and women, tents and booths.

The reader has, no doubt, heard of the existence of a fever called hay fever, attacking delicate persons, during the harvest of that fodder.

Herodotus informs us, that the Scythians became intoxicated by inhaling the vapour from the seeds of a kind of flax; and modern medicine has observed, that the odour alone of the hen bane, particularly when its power is heightened by the action of heat, produces in those who inhale it a disposition to anger and quarrelling.

The *Dictionnaire de Medecine de l'Encyclopedie Methodique* (Tome 7, article *Josquiame*) cites three examples in proof of it.—The most remarkable is that of a married couple, who, perfectly harmonious and affectionate everywhere else, could not pass a few hours together in the room where they worked, without engaging in the most bloody strife. The room was thought to be enchanted or bewitched. At length it was discovered, that the whole blame of these terrible disputes was attributable to a large packet of the seeds of hen bane, placed near a stove; and their removal caused a perfect restoration of peace.

Two persons sleeping in a granary containing the seeds of that plant, were attacked by stupor and violent pain in the head; and two others in Saxony are reported to have become mad after breathing the smoke produced by burning the same seed. Very strong smells have been occasionally supposed to produce epilepsy. The malva moschata (mush mallow) causes, it is said, hysterical attacks—and the flowers of the nerium oleander, and the lily, have been fatal in more instances than one, after they had been long confined in a room. This took place on one well authenticated occasion, among others, in England, in the year 1779.

To “die of a rose, in aromatic pain,” is an idea that loses some of its facetiousness, when we really find some young women (for example the daughters of Nicholas I. Count of Salin, and of a Polish Bishop, &c.) dying immediately after respiring the perfume of some heaps of those flowers, or of violets.

The rooms in which flowers are most diligently amassed by our ladies of fashion, are generally the smallest; it is in the elegant penetralia of the boudoir that they shut them up. The heat there is favourable to the rapid elicitation of odour from the dying plant—the atmosphere is scarcely disturbed by a current, and seldom renewed—whilst, in their natural situation, the cooler air moderates the evaporation, and its undulation wafts towards us a diluted fragrance.

There is no occasion, perhaps, for farther illustration of the effects of vegetable perfume. Our readers must be acquainted, by report, with that fabled tree of Indian climes, whose deadly character has become the theme of many a touching tale, and beneath whose poisonous shade the weary traveller sleeps, to rise no more. Nor

are there many, whose historical recollections will not furnish them with instances of death among great personages, caused by perfumed articles of apparel:—The German Emperor, Henry the Sixth, the wife of Henry the Fourth of France, a Prince of Savoy, a King of Naples, &c. are stated, in the histories of the times, to have been killed by perfumed gloves, handkerchiefs, &c. Without vouching for the truth of statements which may appear too equivocal, they prove the popular opinions of mankind for centuries—and, if we reproach past ages with an excess of credulity, the times from which we have just emerged were not less marked by an universal scepticism: the pure truths of philosophy are to be found in neither extreme; and they who are really earnest in their search, must begin by discarding every preconceived prejudice.—*Belinaye on Hygiene.*

TEMPERANCE DOINGS AT WASHINGTON.

The resolutions and speeches at the meeting in the capitol which preceded the formation of a *Congressional Temperance Society*, are of a very interesting character. We insert what was said on the occasion by the Rev. Justin Edwards, the zealous and efficient Secretary of the *American Temperance Society*. This gentleman offered the following resolution:

Resolved, That the success of the cause of Temperance in this, and other countries, affords high encouragement to the friends of morality to persevere in their efforts till intemperance and its evils are banished from the earth.

Mr. CHAIRMAN,—That a great change has taken place in the public sentiment and practice with regard to the use of ardent spirit, is well known to all in this assembly. It is a change, greater probably than has ever before been effected by such efforts, on such a subject, since the creation. It is spoken of, not only in this country, but in other countries, as one of the wonders of the world.—And mark, sir, its aspect on *free institutions*, and upon the great cause of civil liberty among the nations. A distinguished gentleman in Germany, remarked, “there must be something in America very peculiar; and *free institutions* must be peculiarly favourable to the influence of truth over the minds of men; otherwise there never could have been effected such a great change in the habits of the people as has been witnessed with regard to the use of ardent spirit.” And what, sir, is that change? It is one which, in the course of a few years, has reached every part of this country.—More than 1,500,000 of our countrymen have ceased to use ardent spirit. Many of them, a few years ago, used it every day, and without a thought that it was improper; who, by attention to the subject, in view of the facts which have been developed, have come to the fixed and settled conclusion, that it is morally wrong for them to use it, or to furnish it for the use of others; because it is in their view, injurious to the body and the soul, both for this life and the life to come. More than 1500 men have ceased to make it. They

do not believe it right, even to accumulate property by such an employment. More than 4,000 men have ceased to sell it. They will not for money continue to be accessory to the ruin of their fellow men. More than 600 vessels now float on the ocean, that do not carry it; vessels which visit every clime, and some of which even circumnavigate the globe; and not only without injury, but with a manifest increase of the health, the comfort, and the safety of the men. Without a drop of what was lately thought to be essential to mariners, they can navigate polar seas and torrid zones; can ride the mountain wave, and outride the storm and the tempest, which would shipwreck a vast portion of all the vessels where the men freely use it. And so manifest has been the increase of comfort, that the sailor who has taken a voyage on board a temperance vessel, has often been the first to ship on board the same again; and that too, when other vessels, stored with the poison, in which he might have gone, have sailed from the very same port. He prefers, after having made the experiment, to sail in the temperance ship. And such has been the increase of safety, that the rate of insurance has, in such cases, been materially diminished.

Said an old sea captain, who used to furnish his men with spirit, and who had several times been wrecked, "In every instance it was connected with drinking." For several years he has not carried spirit, and has not been shipwrecked. "In a storm," said he, "when danger becomes great, sailors begin to drink, and almost immediately after they begin to drink, they begin to despair, and soon give up all for lost, and drink on, till they are lost; when, had they taken none, and done their duty as they would had they been sober, they had outrode the storm and been safe." "Never," says a distinguished navigator, "till the sea gives up her dead, shall we know how many, through the influence of ardent spirit, have found a watery grave." Said the owner of a ship, "I made an express agreement with the captain before he sailed, that no ardent spirit should be taken on board; but in violation of that agreement, he, in a foreign port, took on board four gallons of brandy for his own use, and that four gallons of brandy cost me \$4000. Nearly all the losses at sea which I have ever suffered, were occasioned by the use of spirit; and I will never send out another vessel under the care of any man who uses it, or will take it on board." And this change of sentiment, Mr. Chairman, and of practice, is becoming general. Nor is it confined to the merchant service, it extends to the navy. Of 1107 men belonging to the Mediterranean squadron, exclusive of commissioned and warrant officers, 819, according to the statement of Commodore Biddle, have voluntarily relinquished their allowance of spirit. And the Secretary of the Navy states, that the Pacific as well as the Mediterranean squadron, now, has almost *entirely* abandoned the use of ardent spirit, and that the subsequent improvement in the health and conduct of the crews, has become a topic of remark, both by the surgeons and the officers. And may we not hope, sir, that the time is not distant, when the practice of furnishing seamen with "daily poison," as a part of the

ration, will be forever done away. In the army this has actually been accomplished; and the country, I trust, sir, will not forget to whom they are indebted for the increase of the respectability and moral worth, the happiness and strength of that branch of national defence, which has been occasioned by this change.

Nor is this all; more than 5000 drunkards have, within five years, ceased to use intoxicating drink; and are, as all other drunkards will be, if they pursue that course, *sober men*. For so perfect is the divine government, that it is not passible for a drunkard to be formed under it, except by the violation of the laws of that government. And even if a man, in violation of those laws, has become a drunkard, and sunk to the lowest depths of degradation, let him just cease, by his own wickedness to perpetrate that degradation, and the providence of God, in a single month, will make him a sober man; and will infallibly keep him sober till he dies, on the simple condition, (which I must think is most reasonable) that he will just refrain from making himself, by his own wickedness, a drunkard. And were there no man to do any thing more to make drunkards than God does, there would be none; and if men will now imitate Him, or only make it their grand object to do this, drunkards will cease from under heaven. Or if all who are now sober will only continue so, all who will not become sober, will soon be removed, no new drunkards will be made, and our world will be free. Facts justify the conclusion, that more than 30,000 in our own country, have already, by the change which has taken place, in the public sentiment and practice, been saved from becoming drunkards. More than 500,000 are now embodied on the plan of abstinence from the use of ardent spirit, in more than 4000 temperance societies: twenty-one of these are state societies; and it is believed that the time is not distant when there will be a state society in every state in the union.

Nor is this reformation confined to this country. It began here, but it was not stopped here. More than 100,000 are already embodied on the same plan, in Great Britain. The Fourth Report of the American Temperance Society, and many other temperance publications from this country, have been republished entire in that, and are now in a course of circulation throughout, the kingdom.—Applications have been made, for American temperance publications, from Switzerland, and Germany, and Sweden, and various other countries, in all of which temperance societies have been formed and are constantly increasing. And if we, Mr. Chairman, do our duty, the prospect is fair, and strong, that these societies will be formed round the globe; and will prepare the way for the light and the love, of the holy, illuminating, and purifying Spirit to fill the whole earth.

JOURNAL OF HEALTH AND RECREATION.

PHILADELPHIA, APRIL, 1833.

Spring is arrived—the season of poetry and love—of young hopes and budding flowers. But spring, like youth, is fickle and wayward; and in the same day exhibits to us sun-shine and shower—calmness and boreal blasts. We must not then confide too much in spring promises—nor allow ourselves to be allured by the wooing of the southern breeze and too hastily to abandon our winter coverings—our flannel and hose casements. We must wait for a more stable character to be imparted to the season, lest we woo, not kind tumults, gentle sighs and roseate blushes, but palpitations dire, moans, twinges rheumatic, the sickly hectic of consumption and remediless wasting. We ought to hold to our winter garments at this time, whilst we may advantageously change our food—using less animal and more vegetable matters, and sometimes keeping a lent, for health's if not religion's sake. We need not fear to temper our feverish heat by free potations of the “native element,” the draughts from the fountain of Hygeia—pure water. If we escaped through the winter despite, the supply of the vintner and the brewer—or the fell poison from the still, let us not further tempt our fate by a continuance of such inflammable drinks.

In fine, we should endeavour at this time to fall within the line of exertion whether corporeal or mental, and of excitation of each separate function, which we have been accustomed to during the winter season. If thus prudent we shall escape the worse than midsummer madness—the burning causus—the prostrating chelera; and, acquiring energy by regular successive exposure to the elemental vicissitudes, glide gently into the mellow autumn, and take once more our seat at the winter hearth, one of a circle in which tranquil joy and gladness, the soft tones of a beloved companion and the infantile prattle are present, and fill the soul with truest harmony. But not for the drunkard, the glutton, the contemner of God's laws and of human charities and love, are such an annual career and tranquil termination promised.

STRANGE IMPRISONMENT.

That in broad day light, in the populous town of Nuremberg, a youth should be seen for the first time, of whose origin, early life

and the company and circumstances, with which he was brought there, nothing could be learned, despite the most persevering and minute inquiries, is one of the most unexpected and singular events that could have transpired in a civilized country, in this civilized age. The youth in question has been called Caspar Hauser. It is of his peculiarities that some account is given in preceeding pages of the present number of this Journal. The work from which we derive the extract is a small 12mo published at Boston by Allen and Ticknor, and one of the most highly interesting productions of the present day. The title itself is attractive. It runs thus—CASPAR HAUSER.—*An Account of an individual kept in a dungeon, separated from all communication with the world, from early childhood to about the age of seventeen. Drawn up from Real Documents. By ANSELM VON FEUERBACH, President of one of the Bavarian Courts of Appeal, &c. Translated from the German.*

The person or persons by whom Caspar was so long kept in durance, and of course their motives, are still an impenetrable mystery. To the philosopher and medical jurist the narrative is one of absorbing interest—to the humane and the sympathizing of all classes, it has all the attractions of the most elaborated fictitious narrative. Germany seems to be ever the land abounding in the marvellous and imaginative—since of no other in Europe could it be said as it is in the account before us that—

“Occurrences similar to those which Hauser has related, are by no means unheard of. Dr. Horn, for instance, saw in the infirmary at Salzburg, but a few years ago, a girl of twenty-two years of age, and by no means ugly, who had been brought up in a hogstye among the hogs, and who had sat there for many years with her legs crossed. One of her legs was quite crooked, she grunted like a hog, and her gestures were brutishly unseemly in a human dress.”

Ignorant as Caspar was for a length of time after his liberation, of the most familiar phenomena, and coarse his mode of life, during his long confinement, there were traits of disposition and some habits, which would be worthy the imitation of the more intelligent and refined. His simplicity of regimen and his extreme love of order and cleanliness may be adduced as instances in point.

“A most surprising and inexplicable property of this young man, was his love of order and cleanliness, which he even carried to the extreme of pedantry. Of the many hundreds of trifles of which his little household consisted, each had its appropriate place, was properly packed, carefully folded, symmetrically arranged, &c. Uncleanliness, or whatever he considered as such, whether in his own person or in others, was an abomination to him. He observed

almost every grain of dust upon our clothes; and when he once saw a few grains of snuff on my frill, he showed them to me, briskly indicating that he wished me to wipe those nasty things away."

MANUAL LABOR.

We have received a copy of the *First Annual Report of the Society for Promoting MANUAL LABOR in Literary Institutions, including the Report of their general Agent, Theodore D. Weld, New York, 1833.*

We have already made a tolerably long extract from one of the communications to Mr. Weld, and propose to do the like in a future number. Mr. Weld presents the advantages of the system under consideration under the following heads. I. The Manual Labor System furnishes exercise natural to Man. II. It furnishes exercise adapted to interest the Mind. III. Its moral effect would be peculiarly happy. IV. It would furnish the student with important practical acquisitions. V. It would promote habits of industry. VI. It would promote independence of character. VII. It would promote originality. VIII. It is adapted to render permanent all the manlier features of character. IX. It would afford facilities to the student in acquiring a knowledge of human nature. X. It would greatly diminish the expense of recreation. XI. It would increase the wealth of the country. XII. It would tend to do away those absurd distinctions in Society which make the occupation of an individual the standard of his worth. XIII. It would have a tendency to render permanent our republican institutions.

"The distinguishing peculiarity of this institution is, that agricultural or mechanical labor is the employment of the student during those hours which in other institutions are left *vacant*. This system makes no infringement on the hours of study. *The only difference between manual labor institutions and others, is the disposition which is made of the hours of relaxation. In the former, they are devoted to healthful and profitable exercise; in the latter, to any thing or nothing, at the option of the student*"

In common with every citizen, whose patriotism prompts to aspirations after a higher and purer standard of moral excellence and intellectual acumen for his countrymen at large, we wish entire success to the zealous and well directed efforts of the Society engaged to diffuse correct notions of the value of Manual Labor in Literary Institutions. This system strikes us as the only natural and efficient means of arresting and preventing that deterioration of mind and body, which so generally result from the excessive refinement of civilization among crowded communities, on whom

there is no immediate call for supporting themselves by their own labor. The system is favourable to health, morals and happiness—it will tend to make men better and more useful citizens, and is, we can securely say, worthy of all the encouragement and fostering care of both governments and individuals.

Echoes.—Many remarkable phenomena in the natural world are produced by the reflection and concentration of sound. Every person is familiar with the ordinary *echo* which arises from the reflection of sound from an even surface, such as the face of a wall, of a house, of a rock, of a hill, or of a cloud. As sound moves at the rate of 1090 feet in a second, and as the sound which returns to the person who emits it has travelled over a space equal to twice his distance from the reflecting surface, the distance in feet of the body which occasions the echo may be readily found by multiplying 545 by the number of seconds which elapse between the emission of the sound and its return in the form of an echo. This kind of echo, where the same person is the speaker and the hearer, never takes place unless when the observer is immediately in front of the reflecting surface, or when a line drawn from his mouth to the flat surface is nearly perpendicular to it, because in this case alone the wave of sound is reflected in the very same direction from the wall in which it reaches it. If the speaker places himself on one side of this line, then the echo will be heard most distinctly by another person as far on the other side of it, because the waves of sound are reflected like light, so that the angle of incidence, or the inclination at which the sound falls upon the reflected surface, is equal to the angle of reflection, or the inclination at which the sound is returned from the wall. If two persons, therefore, are placed before the reflecting wall, the one will hear the echo of the sound emitted by the other, and obstacles may intervene between these two persons so that neither of them hears the direct sound emitted by the other; in the same manner as the same persons similarly placed before a looking-glass would see each other distinctly by reflection, though objects might obstruct their direct view of each other.

Hitherto we have supposed that there is only one reflecting surface, in which case there will be only one echo: but if there are several reflecting surfaces, as is the case in an amphitheatre of mountains, or during a thunder-storm, where there are several strata or masses of clouds; or if there are two parallel or inclined surfaces between which the sound can be repeatedly reflected, or if the surface is curved so that the sound reflected from one part falls upon another part, like the sides of a polygon inscribed in a circle,—in all these cases there will be numerous echoes, which produce a very singular effect. Nothing can be more grand and sublime than the primary and secondary echoes of a piece of ordnance discharged in an amphitheatre of precipitous mountains. The direct or primary echoes from each reflecting surface reach the ear in

succession, according to their different distances, and these are either blended with or succeeded by the secondary echoes, which terminate in a prolonged growl ending in absolute silence. Of the same character are the reverberated claps of thunder reflected from the surrounding clouds, and dying away in the distance. The echo which is produced by parallel walls is finely illustrated at the Marquis of Simonetta's villa near Milan, which has been described by Addison and Keyser, and which we believe is that described by Mr. Southwell in the *Philosophical Transactions* for 1746. Perpendicular to the main body of this villa there extend two parallel wings about fifty-eight paces distant from each other, and the surfaces of which are unbroken either by doors or windows. The sound of the human voice, or rather a word quickly pronounced, is repeated above forty times, and the report of a pistol from fifty-six to sixty times. The repetitions, however, follow in such rapid succession that it is difficult to reckon them, unless early in the morning before the equal temperature of the atmosphere is disturbed, or in a calm still evening. The echoes appear to be best heard from a window in the main building between the two projecting walls, from which the pistol also is fired. Dr. Plot mentions an echo in Woodstock Park which repeats seventeen syllables by day and twenty by night. An echo on the north side of Shipley church in Sussex, England, repeats twenty-one syllables. Sir John Herschel mentions an echo in the Monfroni palace at Venice, where a person standing in the centre of a square room about twenty-five feet high with a concave roof, hears the stamp of his foot repeated a great many times, but as his position deviates from the centre, the echoes become feebler, and at a short distance entirely cease. The same phenomenon, he remarks, occurs in the large room of the library of the museum at Naples. M. Genefay has described as existing near Rouen a curious oblique echo which is not heard by the person who emits the sound. A person who sings hears only his own voice, while those who listen hear only the echo, which sometimes seems to approach, and at other times to recede from the ear; one person hears a single sound, another several sounds, and one hears it on the right and another on the left, the effect always changing, as the hearer changes his position. Dr. Birch has described an extraordinary echo at Roseneath in Argyleshire, Scotland, which certainly does not now exist. When eight or ten notes were played upon a trumpet, they were correctly repeated, but on a key a third lower. After a short pause another repetition of the notes was heard in a still lower tone.

In the same manner as light is always lost by reflection, so the waves of sound are enfeebled by reflection from ordinary surfaces, and the echo is in such cases fainter than the original sound. If the reflecting surface, however, is circular, sound may be condensed and rendered stronger in the same manner as light. I have seen a fine example of this, in the circular turn of a garden wall nearly a mile distant from a weir across a river. When the air is pure and homogeneous, the rushing sound of the water is reflected

from the hollow surface of the wall, and concentrated in a focus, the place of which the ear can easily discover from the intensity of the sound being there a maximum. A person not acquainted with the locality conceives that the rushing noise is on the other side of the wall.

In whispering galleries, or places where the lowest whispers are carried to distances at which the direct sound is inaudible, the sound may be conveyed in two ways, either by repeated reflections from a curved surface in the direction of the sides of a polygon inscribed in a circle, or where the whisperer is in the focus of one reflecting surface, and the hearer in the focus of another reflecting surface, which is placed so as to receive the reflected sounds. The first of these ways is exemplified in the whispering gallery of St. Paul's and in the octagonal gallery of Gloucester Cathedral, which conveys a whisper 75 feet across the nave, and the second in the baptistery of a church in Pisa, where the architect Giovanni Pisano is said to have constructed the cupola on purpose. The cupola has an elliptical form, and when one person whispers in one focus, it is distinctly heard by the person placed in the other focus, but not by those who are placed between them. The sound first reflected passes across the cupola, and enters the ears of the intermediate persons, but it is too feeble to be heard, till it has been condensed by a second reflection to the other focus of ellipse. A naval officer, who travelled through Sicily in the year 1824, gives an account of a powerful whispering place in the cathedral of Girgenti, where the slightest whisper is carried with perfect distinctness through a distance of 250 feet, from the great western door to the cornice behind the high altar. By an unfortunate coincidence, the focus of one of the reflecting surfaces was chosen for the place of the confessional, and when this was accidentally discovered, the lovers of secrets resorted to the other focus, and thus became acquainted with confessions of the greatest import. This divulgence of scandal continued for a considerable time, till the eager curiosity of one of the dilettanti was punished, by hearing his wife's avowal of her own infidelity. This circumstance gave publicity to the whispering peculiarity of the cathedral, and the confessional was removed to a place of greater secrecy.

A remarkable subterranean echo is often heard when the hoofs of a horse or the wheels of a carriage pass over particular spots of ground. This sound is frequently very similar to that which is produced in passing over an arch or vault, and is commonly attributed to the existence of natural or artificial caves beneath. As such caves have often been constructed in times of war as places of security for persons and property, many unavailing attempts have been made to discover hidden treasures where their locality seemed to be indicated by subterraneous sounds. But though these sounds are sometimes produced by excavations in the ground, yet they generally arise from the nature of the materials of which the ground is composed, and from their manner of combination. If the hollow of a road has been filled up with broken rock, or with large water-

worn stones, having hollows either left entirely empty, or filled up with materials of different density, then the sound will be reflected in passing from the loose to the dense materials, and there will arise a great number of echoes reaching the ear in rapid succession, and forming by their union a hollow rumbling sound. This principle has been very successfully applied by Sir John Herschel to explain the subterranean sounds with which every traveller is familiar, who has visited the Solfaterra near Naples.

SAGO—SAGUS FARINIFERA, AND OTHER SPECIES.

The substance known in commerce under the name of sago is a farinaceous pithy matter, extracted from the trunk of a tree.

This tree is a native of the south-east of Asia, and of the islands of the Indian Ocean, where it grows spontaneously, and is perfected without any culture. This circumstance occurring with regard to a substance highly nutritive, in a climate which disposes the human frame to inaction, occasions the adoption of sago in many places as the general food of the population, to the neglect of other plants, the cultivation of which would call for some amount of exertion.

The sago, or, as it is called in the Molucca Islands, the libley tree, is of peculiar growth. The trunk, which is formed of the bases of the leaves, grows at first very slowly, and is covered with thorns; so soon, however, as the stem is once formed, the growth of the tree proceeds with very great rapidity, so that it speedily attains its full height of thirty feet, with a girth of five or six feet, losing in this stage its thorny accompaniments. Like the cocoa-nut tree, the sago has no distinct bark that can be peeled off, but the trunk consists of a long, hard, ligneous tube, about two inches thick, the internal area of which is filled with a kind of farinaceous pith, intermixed with numerous longitudinal fibres. The maturity of the tree is known by the transpiration of a kind of whitish dust through the pores of the leaves, and when this appears the trunk is felled near to the ground.

The best account of this tree, and of the mode of preparing its pith for use as human food, is to be seen in Forrest's account of the Molucca Islands: it is to the following effect.

“The tree being felled, is cut into lengths of five or six feet. A part of the hard wood is then sliced off, and the workman, coming to the pith, cuts across the longitudinal fibres and the pith together, leaving a part at each end uncut, so that when it is excavated, there remains a trough, into which the pulp is again put, mixed with water, and beaten with a piece of wood. Then the fibres, separated from the pulp, float at top, and the flour subsides. After being cleared in this manner by several waters, the pulp is put into cylindrical baskets made of the leaves of the tree; and if it is to be kept some time, those baskets are generally sunk in fresh water to keep it moist. One tree will produce from two to four hundred weight of flour.

“We seldom or never see sago in Europe but in a granulated

state. To bring it into this state from the flour, it must be first moistened and passed through a sieve into an iron pot (very shallow) held over a fire, which enables it to assume a globular form. Thus all our grained sago is half baked and will keep long. The pulp or powder of which this is made will also keep long if preserved from the air, but if exposed, it presently turns sour."

We learn also from the same authority, that loaves of bread are sometimes made in the Molucca Islands of the pith of the sago, and that these loaves are baked in small ovens, "the floors of which are divided by means of partitions into cells about the size of an octavo volume."

The leaf of the sago is used in the same quarter for covering houses, and in that climate will not need to be renewed oftener than once in seven years.

When the sago tree is cut down, its vegetative power still remains in the root, which again puts forth its leaves and forms the trunk, and this proceeds again through its different stages until it is again subjected to the axe, and made to yield its alimentary contents for the service of man.

Sago is also produced from many varieties of palms, but the tree here described is that which furnishes the best. The produce of the *Cycas circinalis*, so often erroneously mentioned as yielding the sago of commerce, is very inferior.

If the native of the Molucca Islands has his sago-bread without the labour of cultivating the plant which produces it, the Indian of the Cordilleras of South America has his supply of milk from a tree, growing at a vast height amidst arid mountains, where no cattle can pasture. *The Cow-Tree* has been described by Humboldt with his characteristic spirit and accuracy; and it was much earlier noticed by Laet, a Dutch traveller, as growing in the province of Cumana. "On the side of a thirsty rock," says Humboldt, "grows a tree whose leaves are dry and husky. Its large roots penetrate with difficulty through the stony soil. During many months of the year not a shower waters its foliage; the branches appear withered and dead; but when its trunk is pierced, a sweet and nourishing milk flows from the wound. It is at the rising of the sun that this vegetable aliment is most plentiful. The natives and the black slaves then gather together from all parts with large wooden vessels to catch the milk, which as it flows becomes yellow, and thickens on the surface. Some make their abundant meal at the foot of the tree which supplies it; others carry their full vessels home to their children."

In tropical countries the force of vegetation is so great, and the wants of society so few, that magnificent trees are destroyed for the sake of a small portion of food, such as a few square feet of an English garden would produce.

EARTHQUAKES.

It has long been believed at Cumana, Acapulco, and Lima, that there exists a perceptible relation between earthquakes and the state of the atmosphere which precedes these phenomena. On the coasts of New-Andalusia the people become uneasy when, in excessively hot weather and after long drought, the breeze suddenly ceases, and the sky, clear at the zenith, presents the appearance of a reddish vapour near the horizon. But these prognostics are very uncertain, and the dreaded evil has arrived in all kinds of weather.

Under the tropics, the regularity of the horary variations of the barometer is not disturbed on the days when violent shocks occur. In like manner, in the temperate zone, the aurora borealis does not always modify the variations of the needle, or the intensity of the magnetic forces.

When the earth is open and agitated, gaseous emanations occasionally escape in places considerably remote from unextinguished volcanoes. At Cumana, flames and sulphureous vapours spring from the arid soil, while in other parts of the same province it throws out water and petroleum. At Riobamba, a muddy inflammable mass called *moya*, issues from crevices which close again, and forms elevated heaps. Flames and smoke were also seen to proceed from the rocks of Alvidras, near Lisbon, during the earthquake of 1755, by which that city was ravaged. But in the greater number of earthquakes it is probable that no elastic fluids escape from the ground, and when gasses are evolved, they more frequently accompany or follow than precede the shocks.

The subterranean noise which so frequently attends earthquakes, is generally not proportionate to the strength of the shocks. At Cumana it always precedes them; while at Quito, and for some time past at Caraccas and in the West India islands, a noise like the discharge of a battery was heard long after the agitation had ceased. The rolling of thunder in the bowels of the earth, which continues for months, without being accompanied by the least shaking, is a very remarkable phenomenon.

In all countries subject to earthquakes, the point at which the effects are greatest is considered as the source or focus of the shocks. We forget that the rapidity with which the undulations are propagated to great distances, even across the basin of the ocean, proves the centre of action to be very remote from the earth's surface.— Hence it is clear that earthquakes are not restricted to certain species of rocks, as some naturalists assert, but pervade all; although sometimes, in the same rock, the upper strata seem to form an insuperable obstacle to the propagation of the motion. It is curious also, that in a district of small extent certain formations interrupt the shocks. Thus, at Cumana, before the catastrophe of 1797, the earthquakes were felt only along the southern or calcareous coast of the Gulf of Cariaco, as far as the town of that name, while in the peninsula of Araya, and at the village of Maniquarez, the ground

was not agitated. At present, however, the peninsula is as liable to earthquakes as the district around Cumana.

In New-Andalusia, as in Chili and Peru, the shocks follow the line of the shore, and extend but little into the interior,—a circumstance which indicates an intimate connexion between the causes that produce earthquakes and volcanic eruptions. If the land along the coasts is most agitated because it is generally lowest, why should not the shocks be equally strong in the savannas, which are only a few yards above the level of the sea?

The earthquakes of Cumana are connected with those of the West Indies, and are even suspected to have some relation to the volcanic phenomena of the Andes. On the 4th November, 1797, the province of Quito underwent so violent a commotion that 40,000 persons were destroyed; and at the same period shocks were experienced in the Eastern Antilles, followed by an eruption of the volcano of Guadaloupe, in the end of September, 1798. On the 14th December the great concussion took place at Cumana.

It has long been remarked that earthquakes extend their effects to much greater distances than volcanoes; and it is probable, as has just been mentioned, that the causes which produce the former have an intimate connexion with the latter. When seated within the verge of a burning crater, one feels the motion of the ground several seconds before each partial eruption. The phenomena of earthquakes seem strongly to indicate the action of elastic fluids endeavouring to force their way into the atmosphere. On the shores of the South Sea the concussion is almost instantaneously communicated from Chili to the Gulf of Guayaquil, over a space of 2070 miles. The shocks also appear to be so much the stronger the more distant the country is from active volcanoes; and a province is more agitated the smaller the number of funnels by which the subterranean cavities communicate with the open air.

UNITED STATES TEMPERANCE CONVENTION.

The United States Temperance Convention, to be composed of three or more delegates from each State, and one or more from each County, who have been, or may be, appointed by Temperance Societies, or friends of Temperance, for that purpose, will meet in the City of Philadelphia, on the 24th day of May; to unite their councils and efforts, by the universal diffusion of information, and by kind moral influence, to extend the principle of abstinence from the use of ardent spirit and from the traffic in it, throughout the United States.

J. EDWARDS, *Cor. Sec. Am. Temp. Society.*

P. S. Editors of papers and periodicals, friendly to the cause of Temperance, are requested to insert the above in their publications.

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THE
JOURNAL OF HEALTH,
AND
RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, MAY, 1833.

[No. 9.]

BELL ON MANUAL LABOR IN LITERARY INSTITUTIONS.

(Concluded.)

We continue the re-publication of the letter of Dr. Bell on the advantages of bodily labour, and even of toil and hardship in quickening and strengthening the faculties of the human mind:—

Poets, too often considered as mere dreamy enthusiasts, and unfitted for the common affairs of life, have been for the most part nice and accurate observers of men and things; have travelled much, and been subjected to vicissitudes of fortune. Homer, as far as we can glean from tradition, was a great pedestrian, and had carefully noted the customs of the various people, and appearance of the countries described in his two grand poems, but more especially in the *Odyssey*. Æschylus was a *soldier* as well as poet, and shared in those ever memorable battles of Marathon, Salamis, and Plataea. Sophocles was of the same school as Æschylus, whom it was his fortune to excel in poetry as well as to surpass in military rank, since he commanded the Athenian armies, and in several battles shared the supreme command with Pericles. He also filled the office of chief magistrate, or archon, with credit and honour.—Virgil was quickened to a display of his powers by misfortune, and for the success of his most finished poem, the *Georgics*, he was mainly indebted to a practical knowledge of rural affairs, and the changes and effects of the seasons, acquired by his residence in the country, until he was forced to visit Rome with his father. Milton was accomplished not only in the learning of the schools, but in a knowledge of the world by foreign travel, and mixing with men of all ranks. He was fond of, and displayed himself to much advantage in the different manly exercises and sports. I was near omitting the contemporary and rival of Shakspeare, the celebrated Ben Jonson, who, at one period a *soldier*, and at another a *mason with trowel*

in hand, still continued to find time for the composition of some of the finest specimens of dramatic poetry in the English language.— Burns' sweetest poems were inspired by the scenery and associations connected with the fields and streams of the country over which he loved to roam, and in which he for years *toiled as farmer*. Scott, fond of *rural sports and exercises*, and of wandering amidst the wild and romantic scenes of his native land, has given them and himself imperishable fame, by describing them in harmonious numbers, and by throwing a new charm over history, in his account of times gone by. His chief, at any rate great charm, is fidelity of description, whether of the features of a country, of the personages introduced, their costume, armour, and accoutrements. All there, to be well and truly portrayed, must have been seen and examined, or the fictitious drawn from the model of real life actually before him.

No college student, with his cigars, late hours, moping and dyspepsy, his fear of the fresh air, and of *rural and domestic occupations*, can ever hope to attain to any of these excellencies. His *complaints, and whinings, and metaphysical jargon in rattling metre, or namby-pamby rhyme, are not poetry*. He must go abroad in the full light of heaven, and roam over mountain and valley, converse with all degrees of men, know their ways and wants, and *the application of science to every day's business*, before he can pretend to be a poet. Seldom, in the routine of scholastic or even common life, *is the mind roused to a full display of its energies*: various if not forceful appeals are required for it to do itself entire justice.

On occasions, indeed, it would seem as if the intellect necessarily must receive the quickening impulse of strong and impassioned feelings. The case of Byron is an illustration of the first opinion. Another notable instance is met with in Alfieri, the chief of Italian dramatic poets. He traversed Europe over and over, with all the eagerness of earnest pursuit, and yet unknowing what he wanted. At last the secret was revealed to him; his ardent temperament only preyed on itself, until the external world furnished him with materials, and study gave him the ability to fashion them into the animated forms of poetry. The forceful energy imparted by active participation in civil strife, and the proscription following defeat, is shown in the fate of Dante. It is his keen observation of character, his multiplicity of individual portraits, obtained in the struggle between Guelph and Ghibelline in Florence, that imparts such strong, sometimes involuntary interest when we peruse his grand poem, or series of poems it may rather be called, composed by him when exiled from his native land. Similar misfortunes, and a still more chequered life, were the lot of the famous George Buchanan. The interruptions to the acquiring of knowledge, by the bustle and agitation of a soldier's life, would seem, to most persons, so great as to forbid any addiction to study, certainly any advancement in science. Yet, it was in the period of his life in which he was a *soldier* in Holland, that the great Descartes laid the foundation of most of those mathematical discoveries which subsequently gave him so

much celebrity. Of a different order of genius, but also commencing his life as a soldier, was the inimitable Cervantes. He was detained five years a captive in Algiers; and even after his return to his native country, was treated with such signal injustice, as to be thrown into prison. It was here that he wrote the first part of *Don Quixote*. Buchanan was a soldier for a time: he composed his celebrated Latin version of the Psalms, in a Portuguese prison. Of Ben Johnson having been also a soldier, I have already spoken. The early life of penury and toil led by Gifford, has been well and forcibly described by himself.

The two celebrated orators of antiquity may be adduced to show how much can be accomplished by *persevering use of bodily exercise*, added to habits of mental occupation. Demosthenes strengthened a weak voice, and cured himself of indistinct articulation, by declaiming while ascending the brow of a hill or walking amid the noise of the waves on the sea shore. Cicero, when he first appeared in the forum, was in such weak health, that his friends despaired of his life. One of our young promising lawyers of the present day, would probably be content with enjoying the sympathy of his fellow citizens, for his infirmities, and in order to keep up their interest in his state, he would speak longer and louder than allowed by the weakness of his chest, smoke an additional number of cigars, perhaps drink his brandy and water, and sit up late at night, to show his studious habits, and his contempt for the rules which give the ignorant countryman health and cheerfulness. At last our youth of fair promise dies, a victim to his intense ardor for study and professional renown; and (but this is not told) to his *silly obstinacy in continuing to smoke and drink, and to sit up late, and indulge in habits of bodily indolence*. Not so acted Cicero: he abandoned, for a time, Rome and the forum, and travelled into Greece and Asia Minor, acquiring bodily vigor, and at the same time improving himself in the graces of oratory.

The sovereigns who have shone most conspicuously in the annals of the world, were those who from fortunate early habits, or from their kingdoms being plunged in intestine or foreign wars, led a *life of activity, often of hardship, and even personal exposure*; such as the emperor Julian, the English Alfred, Charlemagne, Henry IV. of France, Frederick the Great, of Prussia, Peter the Great, of Russia, and in our own day Napoleon Bonaparte.

The ancient philosophers were for the most part men of *action*.—It was reserved for modern times, and an age boasting of its civilization and science, to admit the creed, that philosophic contemplation is incompatible with a discharge of the active duties of life; and that for the mind to develope all its energies, *the body must be kept inactive*. Not thus reasoned and acted the great men of Greece. Socrates, himself, the son of a statuary, spent, the first part of his life with chisel and mallet in hand. Nor, when encouraged to elevate himself to the study of philosophy by Chilo, under Archelaus and Anaxagoras, did he, like our modern *book-worms*, think himself free from the duty of defending his country in the field of battle.—

He fought, it is known, with rare valor, and was so fortunate as to save by his courage two of his friends and disciples, Xenophon and Alcibiades. His lectures and his teachings were oftener under the *broad canopy of heaven*, in the groves of the academy, or on the banks of the Ilyssus, than in the cramped space of man's architecture. Plato, though more favored by noble birth and the inheritance of wealth, than his master, Socrates, was not on this account inclined, like most of our young men in similar circumstances, to indolence and debasing pleasures. His body was strengthened by gymnastic exercises, and his mind cultivated with the study of poetry and geometry. After living twenty-eight years a disciple of Socrates, he travelled over nearly all the then civilized portion of the earth, Greece, Sicily, Magna Grecia, and Egypt. Thus prepared, our wonder is less, that for forty years, the groves of the Academy should resound with the voice of the philosopher uttering the most sublime doctrines in ethics, politics, and human nature in general, in the language of the most seductive eloquence.

With the name of Xenophon, who does not associate ideas of a skilful general, and accomplished and eloquent historian, and a profound and persuasive philosopher? But why continue an enumeration which must be fresh in the memory of every reader. The name of Pythagoras must not however be passed over in silence, connected as it is with so much that is practical in philosophy, pure in ethics, and amiable in common life. Skilled in all the learning of his age, Pythagoras was also celebrated in early life, for his strength and dexterity in gymnastic exercises; and he first made himself known in Greece at the Olympic games, by obtaining, in his eighteenth year, the prize for wrestling. He was not content with the accomplishments and knowledge, imposing as they may have seemed, which he gained in Greece. His powers of observation were strengthened, and his memory stored with a vast and varied collection of facts, connected with the condition, duties and capabilities of mankind, by foreign travel in Egypt and Chaldea.

The rules for early education, inculcated by Pythagoras, and so successfully carried into effect by an immense concourse of followers and disciples, are peculiarly worthy the notice of, and imitation by, the executive committee for promoting manual labor in literary institutions. Here we discover, carried into full practice, upwards of two thousand years before their attempts, the plans of Pestalozzi and Fellenberg. How painful the reflection, that the most *natural and reasonable system of education*, the most conformable with sound theory, and that which has been again and again, in so many remarkable instances, and even in entire communities, proved to be *both practicable and efficient, should have been so long, and still is so generally neglected, or misunderstood and opposed.**

* First Annual Report of the society for promoting Manual Labor in Literary Institutions, including the report of their general agent, Theodore D. Weld. January 28, 1833.

THE FACTORY OR TEN HOURS' LABOUR BILL.

The mischiefs of that cold, heartless, and cruel system, which contemplates and uses man as a mere "producing animal," are at length, thank heaven! brought to light. The cry, the reiterated cry of distress from suffering human nature, is once more heard, and will not we confidently anticipate, be heard in vain. To the sympathies of all—to the benevolent exertions of the influential—an appeal is now made, which we trust will prove irresistible. The diabolical experiment, put in practice for the private ends of a few—ostensibly with the effect of maintaining our character as a manufacturing nation—has been carried beyond the limits which the physical endurance of human beings can bear: it must at length be stopped: the rights of humanity shall be vindicated.

We have on our table a body of evidence—the evidence given before the parliamentary committee on the factories'-labour bill—containing such a mass of damning facts as were sufficient to put the horrors of the Inquisition to the blush. The Bastile, or the severest place of punishment that ever fixed a blot upon any country, was but a type of those dens of suffering and degradation in which a large portion of the people of this kingdom has been condemned to draw out a miserable existence. Public commiseration could be excited, and large subscriptions raised for the abolition of slavery abroad, while till now no ear was turned to the voice of oppression existing at home. A spurious charity was directed to relieve the comparatively comfortable condition of the West Indian negro—while no mercy was extended to the tortured miserable white slaves of England. Our manufactures have flourished, but at an expense of human suffering and of human life, at which posterity will be amazed when the dreadful reckoning is laid before them: and such a reckoning will these minutes of evidence afford when the future historian approaches the subject of the internal economy of Great Britain in the 19th century.

Attempts, from time to time, have not been wanting to enlist the public sympathy in the cause of the abolition of those grievances. Parliamentary investigations regarding the condition of the manufacturing classes have of late years been frequently instituted; but they have been attended with little success, chiefly for want of being popular; but the public till now have been in ignorance of the details. It was not—there is some satisfaction in the thought—it was not for want of medical admonition and warning, that attention failed to be secured to this subject: John Hunter long ago predicted the evils, in the shape of maladies hitherto unheard of, that would infallibly result from our manufacturing system: and a mass of professional evidence was tendered to government in 1819, contributing powerfully to strengthen the same view. Instead of predictions, however, and mere opinions, we now have facts to go upon—facts which are as unquestionable as they are appalling, and which, we doubt not, will lead to the speedy demolition of this horrible state of things.

The subject is one of many relations—it may be contemplated in several points of view—in its political, its moral, its religious, and its medical bearings. It is with the latter chiefly that we have to do—and, luckily for our design, the committee has furnished us with a body of professional evidence illustrative of the topics which we wish more particularly to notice. From the testimony of several of the witnesses, professional and otherwise, we shall first then gather as concise and clear an account as we can of the nature of the place in which the unfortunate beings whose sufferings we commiserate are employed, the kind and quantity of the labour which is imposed upon them, and the calamities and diseases to which they are subject. If we do not prove these places to be the hot-beds of disease, as well as the scenes of cruelty and torture, we shall have sadly failed in our purpose.

First, then, for the place. Dr. Young, of Bolton, in Lincolnshire, gives us some important information on this point. He examined several factories, both in his own town and in Manchester, and found their atmosphere generally to range between 70 and 90 degrees of the thermometer, and to be not only polluted with a vast quantity of dust and flue flying about—so that in some places individuals could not recognize each other within the distance of a few yards—but impregnated with offensive effluvia of the most disgusting description. Much of this artificial high temperature is derived from the employment of gas-lights, which not only destroy the purity of the air, but operate injuriously on the powers of vision.—Are we then to be surprised to find in such a locality premature puberty, immorality, bodily languor—in short, all the ill effects of a torrid climate, without any of its redeeming qualities of a strong sunlight and an open sky? The consequences of this, along with the nature of the labour, and the time of life at which these wretched creatures begin to suffer, render it inevitable that their muscular and bony systems can never be properly developed.

The labour in which the operatives are employed, though termed technically “light and easy,” from the circumstance of its requiring no violent muscular exertion, yet by reason of its monotonous uniformity and long continuance, becomes insufferably painful. It lasts at present during from 12 to 15 hours, or longer, generally from 5 in the morning till 7, 8, or 9 at night, with scarcely any intermission—the meals being swallowed in the mill—the food frequently spoiled and wasted by the quantity of dust accumulated upon it. The mode of labour, and its excessive measure, exacted from young workers, produce, as might naturally be expected, various personal deformities, especially in depraved growth of bone, and undue development of muscle. This, with the foul and heated atmosphere in which two-thirds of the day are spent, and the violent changes experienced upon quitting work in an exhausted state, and being suddenly exposed to the comparatively cold air abroad, lay the foundation for complaints of a fatal description. The poor wretches, if they escape death from pulmonary consumption, are past labour at forty, or perhaps earlier, and seldom fail to become a burthen to their parish.

Nor is this all: their dangers are not always so remote. In that languid condition which "tired nature" experiences towards the close of the most unnatural day—stimulation of every kind, including cruelties of the most brutal sort, are had recourse to, and accidents sometimes ensue at the recital of which humanity shudders: loss of life is trifling compared with some of the dreadful mutilations which frequently occur. A proof, too, that these accidents are the result of fatigue, is found in the fact, that they accumulate towards the conclusion of every week, as well as at the close of each day. Such is the labour, and such are the casualties, to which these young creatures, some of them not more than six years of age, and of both sexes promiscuously, are exposed. Does the reader inquire what may be the wages which these sufferings earn? In many cases, victuals alone!

But are we sure that the duration of human life is considerably shortened by employment in the factories? It is put beyond a doubt by the censuses of 1821 and 1831. Mr. Thackrah long since formed the opinion that a greater amount of disease existed in the manufacturing than in the agricultural districts; and the population returns have justified his conclusions. With respect to the West and North Riding of Yorkshire, this gentleman states in his evidence, that in comparing the former, or the manufacturing, with the latter, or the agricultural district, the number of persons in the West Riding, between 40 and 50 years of age, in a thousand, is far less than in the North; and when we go to other ages more advanced, from 50 to 60, 60 to 70, and so on, the proportion of persons in the West Riding greatly diminishes: in other words, the people in the West Riding have decidedly shorter lives than those in the North. And it appears from the comparative tables of the duration of life laid before the committee, that *about as many die before their twentieth year, where the factory system prevails, as before their fortieth year elsewhere.*

The great object of the framers of this factories' bill is to prevent children from being employed in those places previous to the age of nine years; and to protect those employed, between that age and eighteen, from being subjected to more than twelve hours' labour in the day—two hours for meals included. The very fact of being content with terms so hard as those sought to be procured, is in itself a strong proof of the severity of the system which it is attempted to reform. There is no medical man, or person of any acquaintance with the animal economy, who will not see what we distinctly call the *hardship* of the alternative: for we hold that limiting the hours of labour to ten in the case of children of either sex bears more of the character of a license for tyranny than a protection from ill usage. Dr. Farre, we observe, suggests eight; but Mr. Thackrah's suggestion pleases us better:—"I would much rather say six," said this gentleman: "I speak as a medical man, and a friend to humanity." As to the necessity of extending protection to infants under nine, we are happy to find that no diversity of opinion was manifested by any of the medical witnesses.

In perusing the medical evidence generally, as tendered to the committee on this Bill, we cannot help saying that, in one respect, we derive from it no small gratification, while, in another, we were not a little disappointed. Never was more perfect unanimity among men of profession; but this arose, we feel bound to say, from a circumstance with which we have some fault to find—namely, that the questions put to them were, as nearly as possible, constructed on a uniform model;—they were also, in great part, what is technically called leading questions, not admitting of much range in the replies, and, when they did, eliciting answers remarkable for their sameness. The skeleton form of the queries was of this sort,—after reading two of the examinations we could almost anticipate every question:—What is your profession?—(to which, by the way, with one or two exceptions, none of the learned witnesses answered correctly): what is most conducive to the health of young persons—is exercise necessary?—is pure air requisite?—are not the consequences of inhaling an impure and artificially-heated atmosphere for many hours in the day deleterious?—ought persons of a tender age, and during the period of their growth, to be protected from forced labour?—is it not highly prejudicial, in a physical as well as moral sense, that such young persons should be obliged to work incessantly for fifteen hours a day? &c. &c. Such a mode of conducting the medical portion of the inquiry, while it produced the striking uniformity we have mentioned, and perhaps answered the immediate object sought by the projectors of the measure, clearly bitted and bridled the greater number of the distinguished witnesses from expressing themselves as fully and as satisfactorily as the deep importance of the subject would otherwise have induced them to do. Were it not for the rail-road track in which the testimony of those gentlemen was confined, surely they would have unanimously stated, that, so far from ten hours constant labour being endurable, forced employment, like that in the factories, was altogether objectionable where such tender persons were the agents: at all events, that it was utterly absurd, as well as mischievous, to tie down all alike to the same quantity of work, as if they were so many mere machines, constructed on the same principle, and out of the same materials, and of precisely the same physical power; and that even five or six hours, though within the limits of possibility for a certain number of the children, yet might be downright cruelty to the remainder.

There was but one exception, so far as we could see, to this objectionable uniformity of inquiry—and that was when Dr. Farre was called upon for his testimony. This gentleman, it appears, was enabled to give a comparative statement of the condition of the children of negro slaves at Barbadoes, and those of white ones in our factories at home. We have been deeply interested with the humane, the enlightened, the truly admirable evidence of Dr. Farre: we shall take an opportunity of recurring to it again: meantime, we shall close our remarks for the present, with two of the able replies with which his examination concluded:—

“Assuming that the children of this country are not free agents,

can you have any doubt whatever that they demand protection equally with the child of the West Indian slave?—I think the word demand is a very proper mode of putting the question: for I consider the nation responsible for it: and as a medical man I assert that if you deem it a part of your duty to make laws against *murder*, I consider that legislation is equally necessary for the prevention of death in any mode in which it can be prematurely inflicted, and certainly this must be viewed as a most cruel mode of inflicting it.

“You have no hesitation, then, in saying that, whether considered as a medical or a political question, a remission of the hours of labour imposed upon the children and young persons in this country would be essentially beneficial?—I view it not only as a benefit, but as a duty; and I would say, not only as a physician, a christian, and a parent, but also for the common sympathies of a man, that you are *bound* to afford it.”—*Med. Gazette*.

ON FOOD IN INDIGESTION.

Dr. *Wilson Phillip* observes—The objects to be kept in view in regulating the diet in indigestion, are, that it shall tend as little as possible to produce either morbid distention or other irritation of the stomach.

To eat moderately and slowly, is often found of greater consequence than any other rule of diet. The dyspeptic should carefully attend to the first feeling of satiety. There is a moment when the relish given by the appetite ceases; a single mouthful, taken after this, oppresses a weak stomach. If he eats slowly, and carefully attends to this feeling, he will never overload the stomach.

Morbid distention of the stomach, however, may take place, although there be no error in either of these respects, if the food, being of such a nature that the fluids of a weak stomach are unable to effect the necessary change in it, run into fermentation.

It is evident that morbid distention, from whatever cause, cannot exist without at the same time occasioning morbid irritation of the stomach. The distention itself has this effect, but as deranged digestion must be the consequence of morbid distention, it can never stop here. All undigested food, however small the quantity, is itself a cause of irritation.

Thus the whole train of symptoms, which constitute a fit of indigestion, may arise either from too large a quantity of food, particularly if carelessly masticated, or from food of difficult digestion; most readily, of course, from a combination of these causes. It is, therefore, of great consequence, in regulating the treatment of this disease, to ascertain what kinds of food are most easily changed by the gastric fluid. This is sometimes influenced by peculiarities of constitution, to which no general rules will apply, but it is not difficult to perceive what kind of diet is usually best suited to a weak stomach.

Tough, acescent, and oily articles of food, with a large propor-

tion of liquid, compose the diet most difficult of digestion. It would appear that a feeble gastric fluid, as indeed we might, *a priori*, suppose, does not admit of being much diluted, without having its powers greatly impaired. The diet opposite to this, then, is that which agrees best with dyspeptics. In the first stage of indigestion, a diet, composed pretty much of animal food and stale bread, is the best.

If we except beef and veal, the flesh of old, in general, is more easy of digestion than that of young animals, on account of the greater quantity of mucilage in the latter. All mucilages are of difficult digestion. Even the vegetable mucilages, which in small quantity are generally grateful to the stomach, will oppress it, if taken very freely. They are among the things which, in vulgar language, are called sating, or phlegmy. Whatever produces the feeling known by these terms disagrees with the stomach.

The stronger kinds of animal food, of which beef may be considered the strongest, are most apt to excite fever. On this account we often allow those recovering from fever, or otherwise disposed to it, to eat the animal mucilages, or those meats which contain a great proportion of them, when even mutton, for example, is forbidden. Thus animal jellies and young meats have obtained the name of light; but this only relates to the tendency to produce fever, for as far as digestion is concerned they are heavier than mutton, and, to many stomachs, than beef. A similar observation applies to the vegetable, compared with the animal, kingdom; the former are less apt to excite fever, and are therefore called lighter; but they are in general more difficult of digestion.

From what it arises that mutton is to most stomachs so much more easy of digestion than beef, it would be difficult to say. Most kinds of game are of easy digestion. Fish, independently of the rich sauce with which it is eaten, is, for the most part, less easily digested than the flesh of land animals; and as it at the same time affords less nutriment, it is in both respects less proper for the food of dyspeptics; although from the white kinds being less apt to excite fever, they, like the animal mucilages, have obtained the name of light, a term which so often deceives with respect to what is most easy of digestion, that it is necessary to keep this explanation of it in view.

The meat most mixed with fat, is, *cet. par.*, most oppressive. It is on this account that pork, and the tongues of many animals are of difficult digestion. For the same reason, geese and ducks are the most oppressive kinds of poultry. Turkey is more so than fowl, which, next to mutton, is, perhaps, upon the whole, the most digestible animal food in common use, if the skin be avoided. Of the different kinds of game, pheasant is least easy of digestion. The lean part of venison is, perhaps, the most digestible article of diet. Hare and partridge appear to be as much so as mutton. All kinds of meat become more digestible by being kept till they are tender.

Eggs, as far as relates to a tendency to produce fever, may be regarded as of a middle nature between animal and vegetable food.

It is a common opinion that they disagree with bilious people, that is, people labouring under indigestion, in whom the disease has extended to the function of the liver; and in many cases it is so. In others, even in this state of the disease, they are easy of digestion. I believe, in general, the best way of eating them is soft boiled, with stale bread, the yolk and white part being mixed together. To a few stomachs the white of egg is particularly oppressive.

Few things are of more difficult digestion than new bread. Every thing, as may be inferred from what has been said of the process of digestion, which by mastication forms a tenacious paste, is difficult of digestion, being slowly pervaded by the gastric juice. So difficult of digestion is such a paste, that I have known more than one dyspeptic, whose stomach could only digest new bread when it was soaked in melted butter. Here one of the articles most difficult of digestion was more easily digested than the tenacious paste which its presence prevented. Even bread sufficiently old, which it never is till it is quite dry, is frequently oppressive if taken alone, and in considerable quantity. It still forms a mass not very readily pervaded. The sailor's biscuit, or bread toasted till it is hard, often agrees better with a weak stomach than bread in other states.

Food is often rendered more indigestible by processes employed with a view to assist the stomach. All articles composed of strong jellies, and food carefully mashed, are oppressive. The coarser division which our food undergoes in mastication is better suited to assist digestion. Most dyspeptics find, that potatoes, for example, finely mashed, although without any admixture, are more difficult of digestion, than when properly masticated. During mastication the saliva is freely mixed with them, and a loose mass is formed.—When they are mashed, they resisted admixture with the saliva, as well as the gastric juice. The same observation applies more or less to sops of all kinds. Bread sopped in tea is much less digestible than when only mixed with it in chewing.

Our food is rendered more easy of digestion by simple roasting or boiling, provided it is not too much done. All meat twice cooked is less digestible, both from its being over-done, and from the sauces with which it is mixed. Beyond a proper degree of roasting and boiling, the art of cookery is nothing, but that of pleasing the palate at the expense of the stomach. There are a few circumstances under which it is proper to bribe the patient to eat; under all others, the refinements of the cook are at variance with the objects of the physician. However imposing the plans of concentrating much nutriment in small compass may at first view appear, we may be well assured, that in such concentration something is taken away from what nature designed for our food, which is useful to us.

It is not generally known, that the most concentrated decoction of beef, so far from affording much nutriment, will not, if unmixed with something solid, even allay the calls of hunger. A person under my care was attacked with severe pain of the face, when even the smallest quantity of any solid food was put on the stomach;

a single mouthful of bread never failed to bring on the attack; and, as he at length refused all solid food, he was confined for some weeks to a strong decoction of beef; but, however strong, and in whatever quantity it was taken, it never satisfied the appetite, and he rapidly emaciated.

Fresh vegetables, on account of their tendency to ferment, are, on the whole, injurious in indigestion. Some vegetables, however, are less so than others. Peas, beans, cabbage, and waxy potatoes, I have found the worst. Mealy potatoes, turnips, and brocoli, among the best. They should always be boiled till they are soft. Raw vegetables of all kinds are oppressive; lettuce appears to be the least so. The tough, thready, and membranous parts of vegetables, in particular, are of difficult digestion.

Fruits in general are still more so, especially the cold fruits, melons, cucumbers, &c.; next to these, the mucilaginous fruits, gooseberries, pears, &c. Apples and strawberries I have found, on the whole, lightest; but we more frequently find peculiarities in the stomach with respect to fruits than other articles of diet. To many stomachs the most acescent fruits, currants, mulberries, &c., are particularly offensive. Preserved fruits are often oppressive,—the large proportion of sugar adding to their indigestible quality. To some dyspeptics sugar is so oppressive, that I have known many who were obliged to abstain even from the small quantity used in tea, but in this there is great variety. Most stomachs bear acids better than acescents.

Although bread is generally the better for being hard, provided it be properly masticated, all hard and tough animal food, particularly if it be salted, which adds to its hardness, is of difficult digestion. It seems to be from its hardness that smoked meat is oppressive. Hard and tough animal food cannot, by mastication, be reduced to the loose pultacious form which hard bread assumes.

There are few things in common use so oppressive as butter. It is more so than the fat of meat. The fat of mutton is less difficult of digestion than that of beef; and the fat of venison less so than either. The same may be said of the fat of turtle; but all kinds of fat are oppressive to a weak stomach, and that of which we are inclined to eat the most, is generally, on this account, the worst. We have little experience of oil in this country. From the result of the few trials I have witnessed, I should say that olive oil, to a stomach accustomed to it, is less oppressive than butter, probably than most kinds of fat.

All oily substances are rendered more oppressive by being fried, as in many of our dishes. Such is the peculiarity observed in particular cases, that I have known a dyspeptic digest the fat of bacon toasted, who could not digest mutton; as if the strong stimulus of the former had excited a secretion of gastric fluid, where the milder stimulus of the mutton had failed. Contrary to what happens with respect to other kinds of animal food, the fat of bacon is the most digestible part. If the flame catches it, it is rendered empyreumatic, and, consequently, difficult of digestion. It should be toasted

like bread, before the fire, and is then easily digested by most weak stomachs. It seems to be on a similar principle that the stomach will often digest a little of any thing for which the patient greatly longs; and that the appetite sometimes increases after we begin to eat.

Cheese is, in general, still more difficult of digestion than either butter or fat. With their oily nature, it combines the hardness and toughness of the dry and compressed curd, which is very difficult of minute division. Milk and cream, with their preparations, are generally oppressive, in proportion to their richness: but the same proportion of cream mixed with water is more digestible than milk.

Much seasoning is injurious, both by the unnatural excitement it occasions, by which, for the time, it increases the power of the stomach, at the expense of subsequent debility; and by inducing us to eat too much. If used in excess, it may also, like other strong stimulants, have a more direct tendency to induce the second stage of the disease.*

POISONS.

Poisons may be defined to be substances, which, applied to the animal body in very small quantity, with considerable certainty destroy life. The investigation of the numerous substances which have this power, and their chemical and medical history, with the means of counteracting their effects, forms a very extensive and important branch of science, known by the name of *Toxicology*; which has of late years been diligently cultivated, and which has given us juster views than we formerly had, of the action of various poisons and their remedies. Different poisonous substances produce their effects on the body in very different modes, and those effects are to be explained in almost every case by the operation of the vital powers; sometimes by chemical laws, and very rarely by mechanical action. Poisons differ in their action according to the parts to which they are applied. The poison of the viper and other snakes, will kill in a very short time, when introduced into a wound, but may be taken into the stomach without any injury; while others, as the caustic alkalies and acids, corrosive sublimate of mercury, and some chemical substances, exhibit their deleterious action on the stomach. Other poisons are equally destructive to whatever part they may be applied, whether to the stomach, the lower part of the bowels, the mouth, the eye, or to an abraded portion of the skin. There are poisons also which exist in the form of gas, and can be received by the breath or by the saliva; the most remarkable instance of this is the very concentrated contagion of certain diseases.

The subject of poisons was long involved in great mystery, and was the object of much credulity among mankind. Many superstitious terrors were connected with it, and the writers of poetry

* Phillip on Indigestion.

and romance lent their helping hand to confirm the popular delusions regarding poisons. It was believed that it was possible to introduce into the system, a poison so nicely adjusted, that it would procure the death of an individual at any given moment, weeks, or months, after it had been administered; that it could be conveyed by means of snuff, or letters, or gloves, or various other ways equally unsuspected. Some atrocious occurrences which happened in France during ten years of the most splendid part of the reign of Louis XIV. spread great alarm on the subject of poisons. Many persons of rank connected with the profligate court of that monarch, were believed to have employed poison to accomplish their purposes of love, ambition, or revenge. The secret appears to have been first vended by a ruined alchymist of the name of Exili; and from 1670 to 1680, so many crimes were perpetrated, and so many persons accused, that a particular tribunal was erected for the trial of poisoning, and obtained the name of the *Chambre Ardente*. Several persons who were convicted of selling *succession powder* were burned at the Place de Greve. Several individuals of rank also, suffered by the hand of the executioner, for poisoning some of their relations and others. Before leaving this horrible subject, we may state, from Dr. Christison, the supposed effects of the celebrated *Aqua Toffana*, or *Acquetta di Napoli*, a slow poison, which in the sixteenth century was believed to possess the property of causing death at any determined period, after months, for example, or even years of ill health, according to the will of the poisoner.—The most authentic description of the *Aqua Toffana* ascribes its properties to arsenic. Hahnemann gives the following account of the symptoms. They are a gradual sinking of the powers of life, without any violent symptom; a nameless feeling of illness, failing of the strength, slight feverishness, want of sleep, an aversion to food and drink, and all the other enjoyments of life; lividity of the countenance. Dropsy closes the scene, along with black eruptions on the skin and convulsions, or a wasting perspiration and purging.

Whatever were its real effects, there appears no doubt that it was long used secretly in Italy to a fearful extent, the monster who has given her name to it, having confessed that she was instrumental in the death of no less than six hundred persons. She owed her success, however, rather to the ignorance of the age than to her own dexterity. At all events, the art of secret poisoning cannot now be easily practised. Indeed, even the vulgar dread of it is almost extinct.

A similar credulity existed with respect to *antidotes*, or substances that had the power of rendering poisons harmless. It was believed that every poison had its own antidote, which was certain of counteracting it; and that a person by taking an antidote in the morning, was secured from danger by poison during the whole day.—Much of this credulity about poisons and their antidotes is now done away; and when noxious substances have been swallowed, remedies are applied, with juster views of the animal economy.—The cases in which an antidote may be most plausibly suggested is

that in which a substance has been swallowed, whose chemical nature is so well known and so much under our power, that we can decompose or neutralize it in our laboratories; thus, if an acid has been swallowed, what is more likely to do good, to than give an alkali? or when a compound salt has been taken, than to give some other to decompose it? But when a substance has once got into the stomach, it is not so easily under our command as if it were in our mortars or vials; some mischief may have been done before our remedy is applied, or the product of our decomposition may be as virulent as the original substances. We are therefore not to trust to chemical, but to vital agents, in our treatment of those who have swallowed poison.

[POISONOUS CHANGES IN MEAT AND BREAD.]

The following paper is by M. CHEVALLIER, and discusses the poisonous changes which occasionally take place in meat, and the accidents thereby produced. The subject is of so much consequence, that we are induced to subjoin a version of the whole of the author's observations.

I have repeatedly published (says he), in the *Jour. de Chimie Medicale*, examples of the ill consequences frequently produced by the consumption of different kinds of meat which have undergone a peculiar decomposition. Convinced that these accidents, though far from being rare, are, nevertheless, comparatively little attended to, owing perhaps principally to the ignorance of the persons who are generally attacked, I have thought it desirable again to revert to the subject. Moreover, during the recent epidemic, (cholera,) two families have suffered from this description of poisoning. The obnoxious alteration chiefly effects pork, the consumption of which meat amounts in Paris alone to above eight millions of pounds annually.

The first set of cases alluded to were those of M. Gr***, doctor of medicine, his wife, daughter, and servant. Another case occurred in the practice of M. Brichetau, who, on the 27th of August, was called to see a woman aged about 40, who, during the day, had eaten some slices of bacon purchased from a pork-butcher in the neighbourhood. She had suffered from vomiting for several hours. The abdomen was excessively tender. She had frequent stools, with tenesmus, and she complained of general pain. Poulitices were applied to the abdomen, and she was ordered lavements, diluent drinks, and the lowest possible diet. Notwithstanding this treatment, the patient had that night above fifty discharges and the abdominal pains continued very severe. Leeches were consequently applied, a warm bath ordered, and the previous treatment continued. In two days the patient recovered. These symptoms at such a time might have readily been attributed to other causes, had not a young woman, who had eaten a very small morsel of the same meat, experienced analogous accidents. And it further appeared that a third person had been very ill after eating pork purchased at the same time and place.

On the 30th of May, 1832, we were directed to institute an official inquiry respecting an occurrence of the same nature, and which gave rise to the subjoined report:—

“We, J. Durocher, M. D., J. L. Geeury, M. D., and J. B. Chevallier, chemist, &c., having been directed by the commissary of police to examine a quantity of pork sold by the *Sieur L.* to a female, who after its use had been affected with vomiting, violent purging, &c.; before proceeding to the examination of the meat, we visited the establishment of the *Sieur L.*, for the purpose of ascertaining whether, if among the meat exposed to sale, there was any of bad quality, or partially altered, or any of the same kind supposed to have occasioned the accident in question. We also were anxious to know if the cooking utensils and other vessels were in proper order. We found, accordingly a dish of pork clippings of disagreeable appearance, and covered with mould, and we observed a vessel of hammered iron used for heating sauces, and the filth of which was absolutely disgusting. The other vessels were also far from being kept with the necessary degree of cleanliness, but they were not dangerous in the least so far as regards *impregnations of copper*.

“*Examination of the Meat.*—The meat, a part of which had occasioned the illness of the female, was composed of several pieces cut from a lump of a preparation known in the pork trade by the name of *Italian cheese*, made of mixed fragments, strongly seasoned, and converted into a kind of compact pie, which is sold in slices.—The pieces we examined were covered, some with blue and others with green mould, the latter circumstance occasioning a coppery appearance. Having divided a portion into three parts, one was treated with distilled water, and the solution tested by reagents, which proved the absence of any poisonous metal. Another part was treated with distilled water acidulated with nitric acid; the solution thus obtained was evaporated, the residuum re-dissolved in water, and tested by reagents, which, as before, gave no indication of any known poison. The last part of the meat was introduced into a new crucible, and reduced to ashes. The ashes did not contain the least trace of copper. The same experiments repeated on the meat found at the shop of the *Sieur L.*, were attended with the same negative results. From these facts it follows that the meat in question contained no copper, but that it had undergone a marked alteration capable of producing the accidents in question; nor is this the first example of poisoning by this particular substance. Dr. Paulus, of Saltz, has already related the history of seven persons who became violently ill after eating *Italian cheese*, and of whom three died. In 1824, a family named Plagneard, at Paris, was also very dangerously affected after partaking of a ham pie which contained no metallic poison, but in which the alteration in question had commenced.—A CHEVALLIER.”

The following report bears great analogy to the preceding. It is drawn up by MM. Lecanu, Labarraque, and Demôriere, who

were directed to examine the remains of a pie which had occasioned the serious illness of eight persons.

"The remains we had to examine were wrapped up in paper; they chiefly consisted of the under and side crusts of the pie, along with a small quantity of a mixture of veal and ham. From the smell of the pie and the mould with which it was covered, considerable decomposition had evidently taken place. The experiments instituted were chiefly devised for the detection of arsenic or copper.—For this purpose a certain quantity of the remains of the pie was treated by boiling distilled water. The liquor filtered through paper previously steeped in water, in order to prevent the passage of any fatty matters, was almost colorless, and reddened litmus paper strongly. It was not disturbed by limewater or ferro-prussiate of potash. The hydro-sulphuret of ammonia, after the addition of a few drops of acid, occasioned a slight haze dependent on the separation of a little sulphur, and quite different from the yellow sulphuret of arsenic. The ammoniacal sulphate of copper produced a sufficiently abundant greenish flaky precipitate, soluble in excess of ammonia, but which, calcined in a tube after being mixed with caustic potash and charcoal, gave no trace of any metallic substance proving that the precipitate depended on some other cause than the presence of arsenic. It proceeded, as one of us has already several times had occasion to ascertain, from the presence in the tested liquor of a minute quantity of starch. Indeed by boiling distilled water on fecula, a fluid is obtained which acts with this test precisely in the same manner.

"Another part of the pie was calcined in a Hessian crucible, and the residue treated with nitric acid. The fluid, evaporated to dryness, and redissolved in water, afforded no trace of copper with the most sensible reagents, such as ammonia and the sulphate of copper. We agree, therefore, in stating that the accidents occasioned are not at all attributable to the presence of copper, arsenic, or any other metallic poison, and that they were solely occasioned by an incipient decomposition of the pie, which had been kept too long in a warm place.—*Labarraque, Demorliere, Lecanu.*"

About two years since, a case of poisoning by mouldy bread happened at Hammersmith, Eng. in the family of the beadle of that parish. His wife purchased in the morning a loaf of bread, of which she ate a slice at breakfast. Her son, 20 years of age, ate two slices of the same bread toasted; almost immediately after the meal, both became unwell, and diarrhœa, vomiting, and tenderness of the abdomen, supervened, and several hours elapsed before these symptoms abated. The loaf, a considerable portion of which we obtained, was of yellowish color. Though baked that morning, and heated for the ordinary length of time, it was sprinkled over with minute fungiform vegetations, the greater number of which were black, a few green, and several yellow. It was soft, wet, inelastic, and so tough that it could be drawn into strings. Its taste was unpleasant, its smell acrid, and it reddened litmus paper when laid

upon it. Submitted to a process much more comprehensive than that pursued by the French chemists, the absence of all recognizable poisons, whether mineral or vegetable, was fully ascertained. In the course of the necessary analysis, the circumstance alluded to by M. Lecanu was remarked, namely, that starch afforded a precipitate with the ammoniaco-sulphate of copper, not unlike that occasioned by arsenic; and on examining the nature of the precipitate, it was found that the ammonia alone produced it. Finally, a peice of the bread occasioned analogous symptoms in a dog and cat, to those the man and woman suffered from. Sufficient evidence was thus obtained to fix the cause of the accidents on the bread.—But the question then arose, Was it the minute fungi constituting the mould which acted as the poison in the manner of other poisonous mushrooms? or, on the other hand, Was it the paste itself, which from decomposition had contracted deleterious qualities? The following facts seemed to establish the latter supposition:—Having collected a considerable quantity of the mould (about five grains), it was eaten by a person ætat. 22, without the slightest ill consequence, while a small bit of the bread from which the fungi had been separated, gave rise to colic pains and tendency to diarrhœa. Further evidence to the same effect was obtained soon after in the following manner:—A quantity of dough was allowed to become mouldy in a moist place. The mould was then carefully removed, and the dough baked into a small loaf. The loaf thus formed, had precisely the same physical and poisonous qualities as the Hammersmith bread, while the mould was eaten by a cat, a dog, and by the experimentalist, with perfect impunity. On analysis of the bread, it was found to contain the due proportion of starch, amidine, sugar, and earthly substances, but the gluten had undergone a marked alteration in its proportions.

These data may, perhaps, be of use to future experimentalists on this interesting subject.—*London Lancet.*

JOURNAL OF HEALTH AND RECREATION.

PHILADELPHIA, MAY, 1833.

The merry, merry month of May is also with us a changeful month—and they who would desire to experience in their own persons its character in the former of these respects, ought to be aware of its nature in the latter. The face of the country invites us abroad to exercise and recreation—we feel instinctively a desire for inhaling at this time the mild vernal air, and already seek the shady retreat, where we think we can best enjoy through more senses than one, the beauties of nature which are now so prodigally and, as it were, with a young and lavish hand, spread around us.—But in thus yielding to our instincts wisely given, let us not forego

our higher privilege of reason, and neglect those precautions which are at once favourable to health and protracted enjoyment. The bright and warm sunny day is succeeded too often by a chilly and damp evening, if not a cold night. Gymnastic and rural sports during the former period ought not to be followed by exposure of our persons, weakened after this exercise and perhaps not adequately protected by outer garments, to the latter. Still more is it necessary and desirable, that the labouring classes, they who gain their living by the sweat of their brow, should attend to these cautions—and not from any false notion of hardiness, stand or saunter out in the evening air without thicker and warmer clothes than they had worn while working during the day. Health and allowable luxury call for bathing at this season—but not in Spartan fashion by immersion in cold water. The tepid and the warm bath are pleasanter, safer and more salutary. Their use, followed by frictions of the skin, may well succeed to the exercises of the gymnasium, and the labours of the field and the workshop. It is highly desirable to establish a healthy function of the skin at this time, and to keep it clean, soft and supple, free for natural and moderate perspiration, which will go far to preserve health during the ensuing summer, and make the heat more tolerable. To aid in accomplishing this desirable end, temperance is all important—the appetite for strong and gross animal food is not now as strong as it was during the winter; and even if it be so, it ought not to be indulged with the same freedom. Still less than at other seasons is there to be found any excuse either in one's own feelings or in false philosophy for having recourse to any other beverage to quench thirst and dilute our solid food, than common water.

The initial article of the *Boston Medical Magazine** for March, consists of the Medical Statistics of Boston, by Dr. Storer. Among other interesting and instructive statements of the proportionate increase of different diseases of late years in Boston, we find the following remarks on *Drunkenness*. They are of a gloomy cast but will be useful, since for reform to be accomplished presumes a prior knowledge of the evil or the vice.

“The bill for the first three years of our series, is unpolluted by a death from *Drunkenness*. Since then, this curse upon our coun-

* Medical men will find in this work much instructive matter, both directly professional and collateral, well drawn up and arranged. The Magazine is conducted by Drs. Pierson, Flint and Bartlett. It is published monthly and consists of 60 to 80 pages, 8vo. at \$4 per annum.

try has been making rapid strides; and in spite of every effort of the friends of temperance, stands fearfully high in the records of our mortality. *Five diseases* only have caused more deaths, during the series under our observation, than *Intemperance*. Consumption, typhus fever, lung fever, dysentery and convulsions,—these, alone, precede this pestilence. “*Convulsions*” ought not, perhaps to be placed before it—because great looseness of arrangement is evident under that head: causes of apoplexy and epilepsy may both have been included under the term “*fits*,” so that it stands the *sixth* malady in point of fatality; and, at the same time, a *voluntary disease*. The compiler of this paper had really believed, that a great diminution of deaths, from intemperance, had taken place during the last few years in this city: that the strenuous efforts which had been made, by precept and example,—that the loud voice of public opinion, had already begun to produce a visible change, even in the *bill of mortality*. Most of the individuals who have died, may have had the disease indelibly fixed upon their systems, previous to the late revival on this point of morality. Heaven grant it may have been so—that the day *may* come, when one immense cause of mortality shall have been removed—when the frame shall no longer be withered by an unquenchable fire—when this national curse shall be blotted out forever.

“The greatest number of deaths from *Intemperance*, occurred during 1831, being 44. In the first half of the series, 93 cases are recorded; in the latter half, 288—making a total of 381.

“No physician, however, in making his observations upon this table of mortality, has a fair criterion of the real state of the pestilence in question. In the various forms of fevers—the inflammations and diseases of the various organs—in convulsions, apoplexy, palsy, insanity, suicide, epilepsy,—in the great scourge of our country, pulmonary consumption—in premature decay, and sinking age, he sees the effects of the destroyer; and feels conscious that consumption, alone, claims more victims to its power.”

After a perusal of the leading article in the last number of the *Annals of Education*, written by the zealous and able editor Mr. Woodbridge, on “*Vocal Music, as a branch of Common Education*,” our first desire was to transfer it entire to the pages of this Journal. Forbidden this pleasure by the length of the article, our consolation must be found in making as copious extracts from it as our limits will allow.

After some clear and cogent observations on the influence which music exercises over the feelings and intellect, Mr. Woodbridge proceeds thus:—

“That those who aim at the improvement of the human character, whether in the pupils of a school, or the members of a community, or the citizens of a State, should leave an instrument of so

great power to be the mere amusement of a drawing-room, or to be monopolized in its most cultivated forms as the means of concealing the vices of a theatre, and drawing greater numbers within the reach of its corrupting influence, seems like a preposterous waste of human power. It is as if the steam engine should be left, only to drive the toy-coach of a child, or to stamp the coin of the counterfeiter.

“We had indeed been accustomed to hear vocal and instrumental music daily, in our early years, and to listen to the best performances of social circles and public assemblies; but we could only say—

“‘We listen, we criticise, and sometimes we are delighted with music; but how seldom do we feel all that the melody is designed to express! Whether it be in the solemn service, or the social circle, it is too often retained, like some old servant, from mere habit, and is generally heard with listless indifference, or positive uneasiness, even by ears that are not tortured with its jarring notes. It sometimes excites a smile, when it is intended to call forth a tear; and its joyous notes are too often, only a discordant clamor of voices.’

“We regarded the accounts of its power, rather as the dreams of poetry, than the conclusions of philosophy, until we *felt* it in the heart-swelling music of the bands of Europe, in the fascinating but corrupting strains of the Opera, and the overpowering chants of the Vatican. But we still regarded its cultivation to this extent, with apprehension and disgust; for we saw it prostituted, as we had seen it too much in our own country, either by using it to cover and point a song, whose sentiments would not be tolerated in any other form, or by placing the most noble, or the most solemn strains, in the mouths of those who never felt a corresponding emotion. We saw men engaged in pouring forth this eloquence, who performed their task with the same feelings with which a mercenary soldier would fight the battles of any country that would give him bread—equally prepared to chant the sufferings of the Saviour, or to sing the song of the sensualist.

“But we found music of an elevating and improving character, in other hands. We found that in addition to sacred and devotional music, there was a large collection adapted to social life, fitted to cheer the moments of weariness, to cultivate the social and patriotic feelings, and elevate the moral taste, without suggesting one evil thought, or exciting one improper emotion. We had been accustomed to regard the regular pursuit of music—especially of instrumental music,—as only suited to professional musicians or to females; and in our sex, as the mark of a trifling or a feminine mind. It was a new surprise therefore, to find it the companion of science and philosophy; to hear it declared by one learned professor the most valuable, nay, an indispensable relaxation to his mind; and to find another, in one of the most distinguished universities of Europe, devoting his leisure to the gratuitous instruction of some of its students.

“Our interest in this subject was redoubled, and music was presented in a new light, on visiting the interior of Europe. It was with no small degree of surprise and delight, that we found it in Germany and Switzerland, *the property of the people*, cheering their hours of labor, elevating their hearts above the objects of sense, which are so prone to absorb them, and filling the periods of rest and amusement with social and moral songs, in place of noise, and riot, and gambling.

“But we were touched to the heart, when we heard its cheering, animating strains echoing from the walls of a school-room, and enlivening the school boy’s hours of play—when we listened to the peasant children’s songs as they went out to their morning occupation, and saw their hearts enkindled to the highest tones of music and poetry, by the setting sun, or the familiar objects of nature, each of which was made to echo some truth, or point to some duty, by an appropriate song.

“We have heard them sing the “Harvest Hymn,” as they went forth before daylight to gather in the grain. We have seen them assembled in groups at night, chanting a hymn of praise for the glories of the heavens, or joining in some patriotic chorus, or some social melody, instead of the frivolous and corrupting conversation, which so often renders such meetings the source of evil. In addition to this, we visited communities where the youth had been trained from their childhood to exercises in vocal music, of such a character as to elevate, instead of debasing the mind, and have found that it served in the same manner, to cheer their social assemblies, in place of the noise of folly, or the poisoned cup of intoxication. We have seen the young men of such a community, assembled to the number of several hundreds, from a circuit of 20 miles; and instead of spending a day of festivity in rioting and drunkenness, pass the whole time, with the exception of that employed in a frugal repast, and a social meeting, in a concert of social, moral and religious hymns, and devote the proceeds of the exhibition to some object of benevolence. We could not but look back at the contrast presented on similar occasions in our own country, with a blush of shame. We have visited a village, whose whole moral aspect was changed in a few years by the introduction of music of this character, even among adults; and where the aged were compelled to express their astonishment at seeing the young abandon their corrupting and riotous amusements, for this delightful and improving exercise.

“It was then that we felt what we formerly expressed, concerning the influence which similar measures might exert on our own population:

““Could we but divest it of the artificial character which a false taste has given it, and bring it back to its native simplicity; could we but employ the voice of childhood in its execution, and gradually train up the whole community to join in harmonious chorus, we might then hope to restore to music its pristine beauty, and its soul-subduing power. It might again soothe to rest the sons of sorrow.

It might assist in subduing to peace, the unsated cravings of the lust for gold, the devouring rage of ambition, and the ferocious spirit of party that infests our land. It might do much to calm the demoniac passions, and overcome the grovelling propensities which follow in their train. It might assist in elevating our hearts to the Author of our being, and invigorate us in our progress toward heaven, and give us many a foretaste of its joys on earth.'

"We could not but ask ourselves the question; Shall that which is deemed as essential to the education of the poor in Germany, as reading, be thought too expensive a superfluity for the American people? Shall an acquisition which is found perfectly within the reach of European peasants, which serves to cheer their hours of fatigue and elevate their minds, and soften and purify their hearts, be considered too difficult or too refined, for the yeomanry of the United States?

"But we were still more surprised at the knowledge of the *science*, which we discovered in the common people. In our early years, we were anxious to understand and possess this power of amusing and exciting, which to some extent we felt. In common with our companions, we attended many successive "quarters at singing school," the only privilege allowed to our nobler sex. But there we found ourselves called upon to perform certain mechanical movements, at the sight of certain signs, while we understood neither the reason nor the connection, of our successive manœuvres of the hand and voice. We attained, in this way, skill enough to amuse ourselves—to make us wish for more—and especially to make us desire the power of self-improvement. But the whole subject was wrapped up in a mass of technical terms, to which even our knowledge of Latin and Greek gave us no clue. We asked questions,—when we knew how to ask them,—in vain; and we were compelled at length to the mortifying conclusion that the subject was too profound for our comprehension, and that it was reserved for the favoured few who possessed the "musical ear," to fathom its mysteries. We gave it up in despair, and left the school with little more than the cabalistical key to this noble science, which is found in the table of flats and sharps—"If F be sharp, Mi is in F,"—and the other rules and definitions of our venerable singing books. What then was our astonishment, at finding this mystery of mysteries perfectly level to the comprehension of every boy, in a German or Swiss school, and see them even write music—yes, *write* music—an acquisition which we and our school-fellows would have deemed a certain evidence of witchcraft in a school-boy; not from dictation only, but from original conception, with nearly as much ease, and as I was told, and should have judged from the performance of these airs, with nearly as much correctness as they could write German. We have been fortunate enough to obtain copies of several songs composed by peasant girls in a village in Switzerland, whose only knowledge of music was derived from the occasional instruction of their pastor, and as an evidence

of our assertion, we present the following expression of filial affection by one of these pupils to her second father."

We cannot here conveniently give the piece: it is inserted in the *Annals*.

"We inquired eagerly into the method of instruction, and some little light dawned even upon our mind. We visited Nageli, and spent some time in the family of Pfeiffer, the fathers of the new system of instruction; and although ill health forbade us to attempt any practical acquisitions, we gained, in a few conversations with Pfeiffer, more distinct conceptions of the nature and signs of music, than in all our 'quarters at singing school.' We found that the science was as simple in its elements, as it is delightful in its influence. We discovered, that, instead of being a mere round of mechanical efforts, requiring what is vulgarly called 'a knack' at the art, which '*came to*' the possessor almost without his knowledge, its principles were more fixed and rational, and its signs more intelligible and uniform, than those of the English tongue; and its practice even more easy than the pronunciation of a new language.—We became satisfied that this mystery of mysteries, this luxury among human enjoyments, was within the reach of all who were not utterly destitute of the power of distinguishing sounds. We were convinced that vocal music was one of the most important branches of national education, especially among a free people; and from this moment we resolved that we would never cease to urge this subject upon our countrymen, until vocal music should become a branch of instruction in every school in the United States. We have laboured to the utmost which the pressure of other duties would allow us, for this object, and have been happy enough to see it taken up by other and abler hands, by whose means, we trust, it will be sooner or later accomplished.

"We received from Professor Pfeiffer a copy of his valuable work; and procured every other we found, adapted to promote the improved method of instruction, or to furnish the appropriate kind of music. We were fortunate enough to find, at our former residence, a teacher who had made many advances towards a rational method of teaching—Mr. Ives, now of Philadelphia,—and who heard and transcribed, with apparent delight, the developments of elementary music, translated in daily portions from the system of Pfeiffer. We had soon the happiness of seeing them carried into effect, by his gratuitous and zealous labours in several schools, by means of the lessons and cards prepared by Nageli; and in a few months, we heard juvenile performances and juvenile concerts, which reminded us of the schools that had first excited our attention. The course of instruction was divested of the mystery and dryness which is usually found; the children were more deeply interested than in any of their studies, and not less successful; although the progress in the mere mechanical knowledge, was not, perhaps, so striking as it often is. The attempt was made to teach the elements scientifically to a class in an infant school; and so complete

was the success of Mr. Ives in this plan, that a professional musician, who heard them after a few weeks' instruction, observed, in a letter on this subject; "I entered upon the examination of the system with some prejudices; but the more I examined it, the more I was convinced of its superiority over the common method, especially in the simple manner in which the principles of music are presented to the mind of a child. The pupils of the infant school which I visited, after a short period of instruction in rhythm (time) only, surpassed in accuracy of time our ordinary choirs of singers." We have since seen and heard, with increasing pleasure, the success of Mr. Ives in training large classes in Philadelphia, whose performance has produced general delight; and have been gratified by the appearance of the *Elementary Singing-Book*, in which the general principles of Pfeiffer are embodied. The contrast of the system with those of our former singing-books, in point of simplicity and interest, is striking."

GREENBANK'S PERIODICAL LIBRARY, VOL. I. No. 1.

Life and Trials of Henry Pestalozzi.—Amongst the literary enterprises of the day, the Periodical Library of Mr. Greenbank gives promise of contributing a full share of instruction and amusement, on very cheap terms, to the reading public. It is intended to publish, every week, a number, which shall consist of 48 pages octavo, in double columns—for five dollars a year.—The publisher assures us that the amount of matter to be thus furnished will be equal to that in fifty common sized books. If we are not greatly deceived, the first number of the Periodical Library, which has just appeared will prove eminently gratifying to nearly all classes of readers: but in a more especial manner to the instructors of youth, and to parents and guardians, to whom the subject of education, not mere words, but the education of the feelings as well as of the intellect, must ever be a subject of absorbing interest. The vicissitudes in the life of Pestalozzi, his untiring zeal amidst frequent discouragements and obstacles, his experiments to arrive at a correct system of mental culture, are pleasingly given by Dr. Biber, the author of the work which is republished in the Periodical Library; and are well calculated to rivet the attention and enlist the sympathies of the general reader. But we shall best justify our favourable sentiments of the work by the following extracts from the number now before us—We begin with

PESTALOZZI'S VIEWS OF EDUCATION.

Orphan School.—Eight years of assiduous labour had brought the Neuhof into a prosperous state of cultivation, when Pestalozzi resolved to make the experiment, how far it might be possible, by

education, to raise the lower orders to a condition more consistent with a Christian state of Society. To secure himself against extraneous influence, which might be at variance with his own views and plans, and to enhance the value of the results which he hoped to obtain, he selected the objects of his care from the very dregs of the people. Wherever he knew a child that was bereaved, or one whom the beggary or vagrancy of his parents rendered in another sense fatherless, he took him into his house; and, in a short time, his establishment was converted into an asylum in which fifty orphan or pauper children were provided with food, clothing, and instruction. He was deeply convinced that pauperism and vice, so far from being counteracted by extensive relief funds and strict police measures, received, on the contrary, an additional stimulus and new nourishment from institutions founded upon the supposition that these evils are necessary, and that all the State can do is to bring them within the bounds and forms of a regular system. He felt that the improvement of the lower orders required an internal stimulus to be awakened in their own breast; that no correction would make them good, and no support happy, unless there were a determination on their part to be good and happy. He saw, moreover, that even such a determination could be of no avail, unless they had it in their power to rise from the low condition to which they had sunk; and he turned, therefore, towards education with a view not only to give them that mental and moral cultivation, which he expected would produce in them a tendency to good, but also to lead them to acquire those practical abilities and industrious habits, by which they would be enabled to keep themselves in a situation favourable to their improvement. His object was to show, not how the State might provide for the poor and correct them, but how it might enable the poor to provide for and correct themselves. He wanted to establish the fact, that by taking the evil at the root, an easy and infallible remedy was at hand: he wanted, moreover, to gain for himself that practical knowledge of the means to be employed for the attainment of his purpose, which at the hand of experience alone he could hope to find. His views were by no means confined to the establishment of a private charity; his ulterior object was to effect a reform in the popular education of his country. He knew that it would be vain for him, at that time, to urge the subject upon the attention of the Swiss governments, and he wished, therefore, both to qualify himself better for the task of advocating it, and to procure such evidence in support of his arguments, as it would be impossible either to confute or to resist.

The purpose of his undertaking was essentially national, and he endeavoured, accordingly, to combine in it, as far as possible, the chief branches of national industry. The children whom he had rescued from the most abject poverty, were initiated in his establishment in the different employments of domestic and rural economy, and from the cotton manufactory in which he was a partner, he procured sufficient work to make them acquainted likewise with this sort of labour, and to keep up industrious habits at those sea-

sons of the year in which agricultural pursuits are necessarily suspended. But he did not imagine, as some have done, that the mechanical acquirement of certain abilities and habits would of itself tend to improve the circumstances of his pupils in after-life; much less did he expect that an amendment of circumstances would better their moral condition. He was aware that all these were only subordinate means, the efficacy of which in producing the desired effect would entirely depend on the simultaneous employment of means of a higher cast. This fact, was indeed, historically established before his eyes, though few men were, like himself, clear sighted enough to perceive it. The resources of Switzerland had been considerably augmented, its industry and its wealth had risen to a degree unparalleled at any former period, and yet the people, so far from showing any symptoms of improvement, were, on the contrary, sinking lower and lower every day. While the rulers of the land and the teachers of the people were buried in deep slumber, amusing themselves with vain dreams of the approaching return of a golden age, Pestalozzi, who lived among the people, and sought their acquaintance with eager benevolence, saw the degradation to which they were fast descending, and he resolved, as far as in him lay, to stem the torrent by endeavouring to place national education upon a more internal and more solid basis. He wished to purify the affections, which he saw depraved into low propensities; to substitute intelligence and true knowledge in the place of cunning and ignorant routine; and to restore to the word of faith, which had been perverted into a dead creed, its original influence upon mankind, by receiving the child, not only as a child of man, but also as a child of God, destined to be restored to the image of divine perfection.

PESTALOZZI'S SCHOOL DISCIPLINE.

School in the Ursuline Convent at Stantz.—Unfavourable as all these circumstances were to the success of the establishment designed by the Helvetic government, they were perhaps the most favourable under which Pestalozzi could have been placed for those higher purposes for which he was destined by Providence; and the convent of the Ursulines at Stantz, which as an orphan asylum ceased to exist before the expiration of a twelvemonth, will live for ever in the history of the human mind, at the school in which one of the most eminent instruments of God for the education of our species, was taught those important principles which he was called to discover and to promulgate. The first benefit which Pestalozzi derived from the hard necessity of his position, was, that he saw himself stripped of all the ordinary props of authority, and in a manner compelled to rely upon the power of love in the child's heart as the only source of obedience. The parents, as we have seen, did not even affect to support him; so far from feeling any moral obligation towards him, they treated him with contempt as a mean hireling, who, if he had been able to make a livelihood in any other way, would never have undertaken the charge of their chil-

dren. This feeling, instilled into the hearts of the pupils, and supported by their natural indisposition to order and submission, established from the beginning a decided hostility between Pestalozzi and the children, which by harsh treatment and violent measures would only have been increased, so as to produce irrevocable alienation. The adoption of any of those crafty systems of rewards and punishments, by which the external subduing of every foul and unclean spirit has been elsewhere accomplished, was, under the circumstances of the case, entirely out of the question, even if Pestalozzi had been capable of making himself head policeman in his school. The only means therefore, by which it was possible for him to gain any ascendancy over his pupils, was an all-forgiving kindness. He felt himself unable, it is true, entirely to dispense with coercive means, or even with corporeal chastisement; but it must not be forgotten that his inflictions were not those of a pedantic despot, who considers them an essential part of a system of performances through which it is his duty to go, but those of a loving and sympathising father, who was as much, if not more than the child himself, distressed by the necessity of having recourse to such measures. Accordingly, they produced not upon the children that hardening effect which punishment generally has; and one fact particularly is on record, in which the result seemed to justify his proceedings. One of the children who had gained most upon his affections, ventured, in the hope of indulgence, to utter threats against a school fellow, and was severely chastised. The poor boy was quite disconsolate, and having continued weeping for a considerable time, took the first opportunity of Pestalozzi's leaving the room, to ask forgiveness of the child whom he had offended, and to thank him for having laid the complaint, of which his punishment was the immediate consequence. Such facts, however, far from convincing Pestalozzi of the necessity or the propriety of punishment, on the contrary proved to his mind the extraordinary power of love, which, if it be once established as the basis of the relation between teacher and child, penetrates the heart of the latter even when the former assumes for a moment the character of wrath, the measures of his forbearance being exhausted by an excessive offence. Indeed, from the manner in which he expressed himself subsequently on the subject, there can be no doubt, that if he had entered his career at Stantz with all those feelings and sentiments with which he left it, punishments of any kind would have been applied by him much more rarely, if not entirely dispensed with.

While Pestalozzi was thus in matters of discipline reduced to the primary motive of all virtue, he learned, in the attempt of instructing his children, the art of returning to the simplest elements of all knowledge. He was entirely unprovided with books or any other means of instruction; and, in the absence of both material and machinery, he could not even have recourse to the pursuits of industry for filling up part of the time. The whole of his school apparatus consisted of himself and his pupils; and he was, therefore, compelled to investigate what means these would afford him for the

accomplishment of his end. The result was, that he abstracted entirely from those artificial elements of instruction which are contained in books; and directed his whole attention towards the natural elements, which are deposited in the child's mind. He taught numbers instead of ciphers, living sounds instead of dead characters, deeds of faith and love instead of abstruse creeds, substances instead of shadows, realities instead of signs. He led the intellect of his children to the discovery of truths which, in the nature of things, they could never forget, instead of burdening their memory with the recollection of words which, likewise, in the nature of things, they could never understand. Instead of building up a dead mind, and a dead heart, on the ground of the dead letter, he drew forth life to the mind, and life to the heart, from the fountain of life within; and thus established a new art of education, in which to follow him requires, on the part of the teacher, not a change of system, but a change of state.

There, in the midst of his children, he forgot there was any world besides his asylum. And as their circle was an universe to him, so was he to them all in all. From morning to night he was the centre of their existence. To him they owed every comfort and every enjoyment; and whatever hardships they had to endure, he was their fellow sufferer. He partook of their meals, and slept among them. In the evening he prayed with them, before they went to bed; and from his conversation they dropped into the arms of slumber. At the first dawn of light it was his voice that called them to the light of the rising sun, and to the praise of their heavenly father. All day he stood amongst them, teaching the ignorant, and assisting the helpless; encouraging the weak, and admonishing the transgressor. His hand was daily with them, joined in theirs; his eye, beaming with benevolence, rested on theirs. He wept when they wept, and rejoiced when they rejoiced. He was to them a father, and they were to him as children.

Such love could not fail to win their hearts; the most savage and the most obstinate could not resist its soothing influence. Discontent and peevishness ceased; and a number of between seventy and eighty children, whose dispositions had been far from kind, and their habits any thing but domestic, were thus converted, in a short time, into a peaceable family circle, in which it was delight to exist. The approach of the milder season produced the same effect upon their health, as Pestalozzi's persevering benevolence had upon their affections; and when those who had witnessed the disorder and wretchedness of the first beginning, came to visit the asylum again in spring 1799, they could hardly identify in the cheerful countenances and bright looks of its inmates, those haggard faces and vacant stares with which their imagination was impressed.

LABOUR AND PAUPERISM IN ENGLAND.

An inquiry into the relative condition of the independent labourer; the soldier, the pauper, and the delinquent, was instituted by Mr.

Chadwick,* who states that he invariably found the honest labourer the lowest in point of condition (though in a position from which he might fall still lower):—

“The indolent pauper the next step above him; the refractory pauper, or the petty delinquent, the next step above the pauper, and even in the places most rigidly managed, nearly approaching to the condition, in point of food to the soldier; and the convicted felon rising far above the soldier, the petty delinquent, the pauper, or the industrious labourer. But it also appears to be true, as declared by the refractory paupers, who proclaim their independence of all regulation, that if they get themselves transported for some more grievous delinquency, that they will receive even better treatment. I was informed by witnesses in Berkshire that several of the agricultural labourers who had been transported for rioting had written home letters to their friends, stating that they had never before lived so well, and soliciting that their families might be sent over to them.”

“From these and several other accounts of shop-keepers as to the quantity of goods which they supply to the labouring classes, it appears that, supposing the children of the honest labourer eat meat, the quantity consumed by each individual does not, on an average, exceed four ounces each week. The excess of meat consumed in the small parish of St. Giles’s beyond the full allowance to adults in Lambeth parish, has been shown to be 4500 pounds annually. From hence it appears that the excess beyond a profuse allowance—the mere waste—by 62 paupers in that small parish, would suffice as a supply of four ounces of meat each to 346 persons, or to 86 families of four persons in each.”

“In the comparison of the dietaries, some allowances must be made for the want of completeness in the details, as to the strength of the beer and other liquids forming part of them; but these generally approximate to the allowances of solid food. The general effect of particular modes of living and the gradation of dietaries, is proved by the declarations and conduct of those who have tried them all.—Nearly all the prison dietaries are twice as good as those of the agricultural labourers; and many of them are much better than the workhouse dietaries. Although the able-bodied pauper does not generally receive so much solid food as the soldier, though he sometimes receives much more, he (the pauper) is on the whole better kept, much better lodged, and does less work. The family of the pauper is much better kept than the family of the soldier. In very few poor-houses have I found any distinction made between the diet of the males and females. In the great majority of the workhouses no distinction is made between the diet of the children and of the adults. From some of the official forms of contract for the transport of troops, it appears that females are allowed, sometimes, only one-half; but, usually, two-thirds the quantity allowed to the

* One of the Assistant Commissioners sent into the country to inquire into the operation of the poor laws in England.

males; and that children are only allowed one-half the quantity of females. The latter, probably, approaches to the natural demand for food, and indicates the prevalent extent of waste in the parochial management of the work-houses.

"The following table will show more clearly, at a view, the relation or comparative condition of each class, as to food, from the honest and independent labourer, to the convicted and transported felon, as obtained chiefly from official returns:—

THE SCALE.

I. The Honest Agricultural Labourer—

According to the returns of Labourer's Expenditure, they are unable to get, in the shape of solid food, more than an average allowance of,

Bread (daily)	17 oz.—per week	-	119 oz.
Bacon	-	-	3 „

Solid food 122 oz.

II. The Soldier—

Bread (daily)	16 oz.—per week	-	112 oz.
Meat (daily)	8oz. cooked—per week	-	56 „

Solid food 168 oz.

III. The Able-bodied Pauper—

Bread per week	98 oz.	Cheese per week	16 oz.
Meat „	21	Pudding „	16

Solid food 151 oz.

In addition to the above, which is an average allowance, the inmates of most workhouses have,

Vegetables	48 oz.	Milk Porridge	3 quarts
Soup - -	3 quarts	Table Beer	7 „

And many other comforts.

IV. The Suspected Thief—(Lancaster.)

Bread per week	112 oz.	Peas per bushel	4 oz.
Meat “	18	Cheese “	4
Oatmeal “	40	Onions “	2
Rice “	5		

Solid food 185 oz.

And 160 oz. potatoes.—(see the Gaol Returns from Winchester.)

Bread	per week	192 oz.
Meat	“	12—204 oz. solid food.

V. The Convicted thief—

Scotch Barley per week	28 oz.	Meat per week	56 oz.
Oatmeal “	21	Cheese “	12
Bread “	140		

Solid food 257 oz.

And potatoes 72 oz.

VI. The Transported Thief—

10½ lbs. meat per week	-	-	-	168 oz.
10½ lbs. flour which will increase, when made into bread to about	-	-	-	182

Solid food 386 oz.

This is the ladder of promotion for the adroit thief; the mal-adroit, it is true, sometimes ascends a step higher, but then all sorts of sympathy are lavished upon them, and if they repent, they are assured their reward is glorious; and the hangman, with the aid of the ordinary, despatches them, (as the newspapers declare) into *bliss eternal*."

SCARPA,

Antonio Scarpa, the celebrated professor of Anatomy and Surgery, died at Pavia on the 31st October last. He was born about 1750 in the province of Treviso; he made himself early known for his anatomical learning, and was professor at Pavia at the epoch of the French invasion in 1796. He then refused to take the oath to the Republic, and was consequently dismissed from his chair. Napoleon, in 1805, having made himself king of Italy, went to visit, among other places, the University of Pavia, the professors of which were duly introduced to him. He suddenly inquired where Scarpa was? The reply was, that Scarpa had been dismissed long since, on account of his political opinions, and because he had refused to take the oaths. "And what have political opinions, and refusal of oaths, to do in such cases?" impatiently interrupted Napoleon. "Dr. Scarpa is an honour to the University, and to my States." Scarpa was therefore invited to resume his chair, which he did, and he continued to lecture to a very advanced age, occasionally employing one of his pupils as a substitute. Besides his great fame in the scientific world, his personal character was held in the highest estimation, and he was beloved and revered by his disciples. The principal among his numerous works are: his *Treatise on the Organs of Hearing and Smelling*, published at Pavia, in 1789; his *Tabulæ Neurologiæ*, or plates of the Nerves of the Human Frame, Pavia, 1794; his *Essays on the Principal Diseases of the Eyes*, 1801; his work on *Anëurism*, 1804; and his *Treatise on Hernia*, Milan, 1809. Scarpa was also a great lover of the Fine Arts, and had formed a valuable collection of paintings by the first Italian Masters.

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"As much as in thee lies, live at heart's ease."

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HINTS ABOUT PHRENOLOGY.

The laws of hereditary descent figure largely in the plan which Dr. Spurzheim proposes as the perfecting process of mankind. Perhaps we cannot interest our readers more than by devoting this paper to an abstract of his views on the subject.

Children participate in the bodily configuration and constitution of their parents, and also in their tendencies to particular manifestations of the mind, these being dependent on the individual parts of the brain.

The qualities of the body are hereditary. There are family-faces, family-likenesses, and also single parts, such as bones, muscles, hair and skin, which are alike in parents and children. The disposition to various disorders, as to gout, scrofula, dropsy, hydrocephalus, consumption, deafness, epilepsy, apoplexy, idiotism, insanity, &c., is frequently the inheritance of birth.

Children born of healthy parents, and belonging to a strong stock, always bring into the world, a system formed by nature to resist the causes of disease; while children of delicate, sickly parents, are overpowered by the least unfavourable circumstance.

Longevity depends more on innate constitution, than on the skill of the physician. Is it not then astonishing that this knowledge, as a practical piece of information, is not taught and disseminated among young people? Indeed it ought to be familiarly and generally known. Even the unthinking must perceive that the enjoyments of life are rendered impossible, when diseases make their ravages in a family; and that love for the most part ceases, when poverty takes up its abode in the house.

There are many examples on record, of certain feelings or intellectual powers, being inherent in whole families. Now if it be ascertained that the hereditary condition of the brain is the cause,

there is a great additional motive to be careful in the choice of a partner in marriage. No person of sense can be indifferent about having selfish or benevolent, stupid or intelligent children.

But it is said that men of great talents often have children of little understanding, and that in large families there are individuals of very different capacities.

As long as eminent men are married to partners of inferior capacities, the qualities of the offspring must be uncertain. The condition of the mother is not valued as it ought to be, and yet it is a common observation that boys resemble their mother, and girls their father, and that men of great talents almost always descend from intelligent mothers. The physical education of both sexes deserves the greatest attention, and it is unpardonable to neglect that of girls.

The degeneration of man is certain in families who intermarry among themselves. Uncles and wives, or first cousins, or cousins who commit this error for several generations, have no children, or their progeny is feeble in constitution of both body and mind.

It is indeed a pity that the laws of hereditary descent are so much neglected, whilst, by attending to them, not only the condition of single families, but of whole nations, might be improved beyond imagination, in figure, stature, complexion, health, talents, and moral feelings.

"It is probable," says Dr. Rush, "that the qualities of body and mind in parents, which produce genius in children, may be fixed and regulated; and it is possible the time may come, when we shall be able to predict with certainty the intellectual character of children, by knowing the specific nature of the different intellectual faculties of their parents."

Three successive generations appear to be necessary to produce an effectual change, be it for health or disease. According to the laws of creation, therefore, it is said, that "the Lord visits those who hate him (those who do not submit to his laws) to the third and fourth generation;" namely, by their hereditary dispositions.

Such causes as produce what is called the old age of nations, deserve to be remarked. Luxury belongs to them, and its influence, if continued during several generations, weakens body and mind, not only of families, but of whole nations.

The Greeks, as appears from their customs, philosophy, and legislation, had particularly in view the beauty and vigour of the human constitution. "As we," says Plutarch, "are anxious to have dogs and horses from a good breed, why should we marry the daughters of bad parents?" Plato spoke against marriages between relations. He, as well as Solon and Aristotle, considered also the age at which it was best to marry. The ancient philosophers commonly fixed it between eighteen and twenty-four for a woman, and between thirty and thirty-six for a man. It is often the case that women, who marry when very young, and bear a numerous family, become early victims to an exhausted constitution.

It may be said that these considerations can never become prac-

tical rules of conduct for society at large. In the actual situation of things, perhaps this is true. But we must also admit that the laws of the Creator will not change to gratify our fancy. If we will not submit to his dictates, we have no right to complain of being punished by unavoidable, though disagreeable results.

Christian principles are not sufficiently exercised in society, yet it is not, on this account, considered superfluous to teach them; and he who loves mankind, will wish for their promulgation. Now the laws of hereditary descent are in the same situation.

The Supreme Being gave us understanding that we might perceive these laws; and having perceived them, it is our first duty to obey them as His dictates; and having done so, we may then, and not till then, expect His blessing to attend us. The special obedience to the natural laws of hereditary descent is an indispensable condition to the improvement of mankind; and nothing but ignorance, superstition, and prejudice can oppose it.—*Ladies' Magazine*.

THE USE OF ALMANACS.

There are few things, in which a man may find more room for speculation than an almanac. There is scarcely a family, however ignorant and indigent, without one copy hanging constantly in sight, and yet there is no production the contents of which fewer persons understand. The sense it contains is not only abstruse and remote from common apprehension, but it is exhibited in the most scientific and concise form. Figures, initials, symbolical characters, and half words every where abound. A stranger who should meet, in every hovel, with a book, in which the relative positions of the planets, the diurnal progress of the sun through the zodiac, the lunar and solar eclipses, the wanderings of Sirius, Arcturus, and the Pleades; of *Occulus, Tauri*, and *Spica Virginis*, are described in a way the most technical imaginable, would be apt to regard us as a very astronomical and learned nation.

That the volume should be bought annually by every family; should be considered as an indispensable piece of household furniture; be so placed as to be always at hand, are facts that would make this inference extremely plausible. He would be not a little surprised to discover, that the book is bought for the sake of that which the memory and skill of children would suffice to find out; of that which costs the compiler nothing more than the survey of a former almanac, and a few strokes of his pen; and that these celebrated computations, these mystic symbols, this adjustment of certain days to certain holydays, are neither attended to nor understood, in this country, by one in ten thousand. The eye roves over them, but the question, what do they mean? never, perhaps, enters the mind. Being accustomed to meet in an almanac with certain figures and arrangements, we are dissatisfied if we find them absent—while a book of this kind being compiled and published anew

every year, we take it for granted, that every new year demands a new almanac.

Habit will account for the continuance of a certain practice, but not for its origin. One would be naturally led to think, that when almanacs were first invented, mankind were more conversant with the stars than at present; that every cottager was interested in the planetary revolutions; in the places of the moon; in the solar progress, and in the birth days of hermits and of confessors. This is partly true: but the source of curiosity respecting the motions of the heavenly bodies, was merely a belief that the incidents of human life were connected with these changes. That tract in the heavens which the sun apparently passes through in a year, was called the Zodiac, and was divided into twelve portions which were called signs, and each of which received a fantastic name. A close connection was imagined to exist between the different portions of the human body and these signs of the Zodiac. Hence it was necessary to state minutely the zodiacal place of the sun, that men might be aware of the accidents to which they were most liable at certain seasons, so that they might avoid or remedy them. The frontispiece of an almanac commonly exhibited a figure, with lines passing from it, exhibiting the supposed connection between the constellations and the human organs; and this frontispiece is still very frequently retained.

Stellar influence, though strong, was rightly supposed to be inferior to that of the planets. The relative position of the fixed stars is apparently unchangeable. Not so that of the planetary bodies: hence curiosity was busy in ascertaining the places of the latter, the prosperous and adverse state of man being supposed to be swayed by the oppositions and conjunctions of these orbs; and hence compilers of almanacs bestowed particular attention on this circumstance. There was a time when festivals and religious observances were almost universally connected with the anniversaries of the births of apostles and martyrs. It was, therefore, necessary to inform the public when these anniversaries occurred. A change of religion has taken away this necessity, at least from the great mass of the population in our own country. Swithen, Margaret, Magdalen, Michael, and Denys are names which the generality of readers overlook. They never dream of making a distinction between the days opposite to which these names appear and other days. To us, therefore, or at least to most of us, their insertion is wholly useless and impertinent, but still they are annually printed, and their omission would create, perhaps, in many, surprise and disappointment, if not disapprobation.

It can scarcely fail to occur, that almanacs might be made the instruments of much general improvement. Custom has introduced them into every family. There is generally a space set apart for miscellaneous information, and in filling this space the compiler is at liberty to exercise his own judgment. The popularity of almanacs will thus afford him an opportunity of imparting wholesome truths to thousands, whose audience he could never hope to obtain

in any other way. In the form of tables; and in the place of much of what is now introduced uselessly, facts in physical and moral science might be happily substituted. What is now occupied by Crispin and Gregory; by the perigee and apogee of the moon; by the risings and descents of Sirius and Arcturus, and by the vagaries of the planets; might surely be supplied with much more useful matter. The happiness of mankind depends, not so much upon the progress which the sciences, abstractly considered, have made, as on the diffusion of the knowledge which already exists. A thousand truths are to be found in the recorded meditations of the wise, of which mankind have profited nothing, because, in general, they remain ignorant of their existence. It seems that the man who employs himself in contriving and executing schemes for making simple, intelligible, and concise, the sciences in their present state of improvement; in making cheaper and more commodious; in clothing in more popular and attractive forms, and putting into the possession of a greater number, the knowledge already acquired, and which is most conducive to their welfare, is, in certain respects, even a greater benefactor to society, than he who is merely content with advancing the various branches of physical and moral knowledge to perfection, by solitary experiments and closet speculations. There can scarcely be conceived an instrument more useful in diffusing useful knowledge, or an opportunity more favourable to the dissemination of truth and happiness than what an almanac affords.

The advantages of this expedient have not been overlooked entirely. In Germany it has been more extensively employed than elsewhere. History, botany, mineralogy; agriculture, and domestic economy, have all been moulded into this form, and with admirable skill and efficacy.

Had the author of the foregoing highly judicious remarks, the celebrated Charles B. Brown, survived a few years longer, he would have been pleased to find his suggestions in relation to the contents of an almanac acted upon to a very considerable extent in this country. We have now our Health almanac, our Temperance almanac, our Agricultural almanac, and many others, the matter of which is admirably adapted to convey useful knowledge to almost every class of society—placing it thus in the hands of thousands whom, but for these publications, it would perhaps never have reached.

THE POTATOE.

The introduction of the potatoe into general use as an esculent vegetable, is one of those events, which, though scarcely noticed upon the page of history, is nevertheless of the first importance, from the influence it has had in promoting the comforts, the health and the happiness of a very large portion of the human family.

Cultivated with but little trouble under almost every variety of climate,—affording by the most simple processes of cookery a cheap;

palatable, wholesome and nutritious food, the potatoe may be denominated emphatically the Bread of the Poor; it is in truth almost the only substitute for the farinaceous grains: while, also, for the tables of the rich it furnishes a delightful vegetable, that has the peculiar recommendation of never being out of season.

The potatoe is a native of Peru, and was first carried to Europe in 1486, by Sir Francis Drake. It was not, however, until about the commencement of the seventeenth century that its introduction as an article of food can be said to have taken place. It was at first planted in a few private gardens as an object of curiosity: but, its importance under many points of view soon became evident, to the intelligent part of the community, and every encouragement was afforded by them to its cultivation in England, Germany and Holland. It was nevertheless long before the poorer classes, to whom the greatest amount of benefit was to accrue from the adoption of the potatoe as an article of diet, could be induced to make use of it in preference to their ordinary, unpalatable, unnutritious, and often unwholesome bread; with which even they were in general but imperfectly supplied.

In France, the prejudices against the use of the potatoe as food were more violent and of longer duration than in almost any other country. It was accused in some provinces of causing the prevalence of severe and fatal diseases and other imaginary evils. So violent was, in consequence, the opposition to the cultivation of the potatoe, that the Comptroller-general thought proper to consult the Faculty of medicine at Paris upon its wholesomeness as food. After cautiously examining the subject, the faculty made a report highly favourable, and calculated to dissipate all apprehensions. It was not, however, until the king, Louis XV. wore a bunch of the potatoe flowers in his button hole in the midst of the court on a day of public festivity that the popular prejudices gave way. The people then for the first time obsequiously acknowledged the usefulness of the gift they had received, and the cultivation of the potatoe and its use as a staple article of food soon became universal. Thus in the introduction of the potatoe into France, as in many other things, the influence and favour of the king was able to effect in a day, what reason and philosophy had failed to do after a labour of many years.

Corn itself was not of more importance to ancient or to modern Egypt than the potatoe is at the present moment to nearly the whole world. Not only does it constitute one of the most wholesome, nutritious, and at the same time the most economical of the vegetable aliments, but it is capable of being applied to other important uses in the arts. From its stalk in Austria is manufactured a cottony flax—the haulm has also been converted into paper. In Sweden sugar is extracted from the root. Bakers in Germany convert the pulp of the potatoe into yeast for their bread. In the same country three different kinds of cheese are prepared from potatoes. A fine size may be also obtained from them which will answer nearly all the purposes of that in common use. By com-

bustion the different parts of the potatoe yield a very considerable amount of potash. Its apples when ripe, ferment and yield vinegar by exposure, or alcohol by distillation. Its tubercles, made into a pulp, are a substitute for soap in bleaching. By different manipulations, the potatoe likewise furnishes two kinds of flour, a gruel, and a parenchyma, which in times of scarcity may be made into bread, or applied to increase the bulk of bread made from grain, and its starch, besides being applicable to all the uses for which the latter is used, is little, if at all, inferior to arrow root. Such are the numerous uses to which this important plant is capable of being applied.

The constituent parts of the potatoe are a dry mealy powder or starch as in grain; a fibrous matter, of a grey colour, similar to the roots of other herbs, and a mucilage resembling that of most esculent vegetables. By the process of boiling, these parts become intimately blended, have their solubility increased, and are consequently more readily digested in the stomach. The dry mealy kinds of potatoe are the most wholesome, and the best mode of cooking them is either that of boiling or roasting. To render potatoes perfectly palatable, and to increase their wholesomeness much care is requisite in boiling them—it is especially important after they are sufficiently cooked, to pour off the water in which they have been boiled, and evaporate the remaining moisture, by replacing the vessel containing them, upon the fire. This renders them remarkably dry and mealy.

Notwithstanding the potatoe affords the chief nourishment of the labouring classes in many parts of the world, and its wholesomeness and alimentary properties are evinced by the bodily strength, health and vigour of those who subsist chiefly upon it, yet, in proportion to its bulk it affords a less amount of nutriment than wheat and some of the other grains. The potatoe is never an unwholesome food, to persons in full health, excepting when reared in an improper soil, badly preserved, improperly cooked, or eaten to excess. Persons, however, it is proper to remark, whose digestive powers are impaired, will find the potatoe often to disagree with them, more especially when it is mashed or fried.

THE HYPOCHONDRIAC.

Behold yon grumbling, waspish, discontented fellow—whom nothing diverts, but every thing displeases.—Hark to his croaking voice condemning mirth and cheerfulness as folly, and the serenity of contentment as the dream of ignorance. He looks abroad upon the light of nature but smiles not; he enters within the domestic circle, but its simple and innocent pleasures fail to cheer him. To him all is dark and gloomy, all is deceitful and insincere. The brightest talents—the most zealous philanthropy, the purest virtue, are in his eyes nothing, worse than nothing—superficial pretensions—hypocritical cant—the perfection of cunning. And who is this person? He is a being blessed with friends—with competence

with talents, and we may add with a heart formed to delight in the happiness of his fellow man. But how came he reduced to this state of partial insanity? By his own folly!—He ate and he drank, despising the unsophisticated appetites that nature had bestowed upon him and turning a deaf ear to the admonitions of reason and experience. He lived a life of luxury in every sense. A want never existed with him, for all his wants were provided for before they could possibly be felt.—In the fullest meaning of the phrase he courted ease—exemption from toil—exemption from thought—from care, almost from exertion—and he is now as you behold him—a hypochondriac! His disease is one which gives more trouble to the physician, and inflicts a greater amount of suffering upon the patient than almost any other. It is a perfect disorganizer of the republic of the mind; which all who are friends to order and who delight to behold cheerful faces and contented minds should join in banishing from the world. When once it gains influence, farewell happiness, farewell tranquility. The legislative power of reason is opposed and suspended. The executive of the will weakened and interrupted in its office. It is a complete grumbletonian—views every thing on the dark side, sets nothing to rights, but is forever muttering every thing is going to ruin. A sad companion this to be chained to day and night—in public and in private. Let common sense prescribe a remedy. All diseases should be checked in the beginning. Hypochondriasis, like faction, should be silenced in its first murmurs. Like a young lover, it makes timid approaches at first. It is an enemy of the cowardly kind, and seldom appears in front of its prey, but attacks covertly and commonly brings up the rear of our misfortunes or our follies. On its first appearance, “resist it,” and like satan, it will “flee from thee.” Never think, because it is sometimes the companion of great men, and brilliant talents, it must be admitted into your closets, or follow you into company.—Have some regard for the happiness of your friends, if not for your own, and you will court by every means the possession of cheerfulness, rather than give way weakly to this gloomy fiend. Hypochondriasis is the eclipse of the mind. When we see a bright character benighted with this malady, we are apt to think some evil planet rules, and wish ourselves spectators of a more pleasing sight—it is not easy to find one more disagreeable. Beware of “Scylla and Charybdis:” steady prudence sails between them, and is seldom molested by this harpy. Immoderate grief, or excessive joy, too much care or too great security, invite the gloomy guest. Raise the voice to too high a pitch and it loses its powers; so it is with the mind. One extreme commonly follows another; and hypochondriasis is apt to follow all extremes. Recollect that the frame of man was made for motion, and that its springs loose their elasticity when they remain too long quiescent, and this disorder finds him an easy prey. But it is by the stomach that hypochondriasis most commonly invades the system.—Beware of the dainty dish—the sparkling glass—the poisoned bowl. Let not prudence and moderation ever sleep when the cloth is spread and the feast displayed.

They who at table are off their guard, will become the victims most assuredly of the gloomy, cruel fiend, hypochondriasis. Industry and innocent amusement, prudence and temperance are the greatest friends to health and happiness, and the most formidable enemies to this disorder. If the complaint threatens to approach, we would recommend, every clear morning, a sight at the rising sun, always moderate exercise, nutritive food, and cheerful company. Never indulge solitude: hypochondriasis, like the assassin, seeks the solitary victim. Do not think to drown it with much wine, nor strong drink—drowning melancholy with liquor, is like giving an importunate beggar money to get rid of him—he may make a bow, and leave you to-day; to-morrow he will attack you with double confidence.

OBSERVATIONS ON ANIMAL MAGNETISM.—BY M. ANDRAL.

M. ANDRAL, in his lectures on pathology, now in course of delivery, recently made some observations on animal magnetism, an excellent account of which, freed from mere extraneous matters, we subjoin. It is taken from the number of the *Gazette des Hopitaux*, of March 2d.

The extatic paroxysm, said the Professor, may be voluntary; it may shew itself independently of an external influence: it may also shew itself in an individual, through the influence of another person, exercising certain acts with a view to its production. To explain the phenomena, two hypotheses have been advanced: according to some, they are all the result of a heated imagination, while others have recourse to an invisible imponderable agent, which they call “magnetic fluid,” and which is held by most to be nothing else than the fluid which is regarded as the cause of common electrical, and electro-magnetic phenomena.

Wishing to be guided by facts alone, in this difficult discussion, M. Andral selected two of the cases recently published, and possessing all the conditions which render their authenticity unquestionable. The first related to an instance of spontaneous somnambulism, which occurred in Italy towards the close of 1832, and appeared in the *Bulletin of Medical Sciences of Bologna*. The narrative runs as follows:—

First Case.—A cook, of Bologna, of nervous temperament, 24 years of age, born of healthy parents, and having never suffered from any serious disease, presented himself at the *Hospital Della Vita*, September 5, 1832, after the eighth paroxysm of convulsions, which had come on in the following manner. For some time various rather severe disappointments had rendered him more irritable than usual, when, on the 21st of July of the year above-named, he had occasion to render his assistance for several hours to an hysterical person, who had seized him by the arm with so much force that he had not been able to disengage himself during the whole of the above period. The impression made by this accident was such that he experienced from the moment of its occurrence general un-

easiness and aching of the lower extremities. On the 15th of August, that is, twenty days after the accident, he fell into the following state: convulsions, of a violent description, appearing always at the same hour, and having the same duration, being, by his own account, similar to those which he still continues to have in the hospital. The attack is usually ushered in, either by somnolence, or by troubled sleep the preceding night, and also by a sensation as of a drop of cold water falling upon his heart every quarter of an hour. This sensation generally manifests itself at the approach of day: it is the *avant courier* of the fit, and ceases some little time before this begins. He has for some hours before a sense of weight at the back of the neck, whence there stretches circularly to the forehead a painful sensation, as of a bandage compressing the temples, and which continues even after the paroxysm. Then, at a quarter past 11 A.M. he experiences coldness of the feet, which extends by degrees to the knees; in a quarter of an hour more the sight begins to be troubled; ringing is heard in the ears; a bad taste is experienced in the mouth; and there is a numbness of all the senses. Trembling of the lower extremities comes on, which by degrees extends to the trunk and upper limbs: a kind of oscillation of all the muscles; and we should say, from the appearance they present externally, that this pervaded all their fibres. The muscles of the face are excepted. The respiration is panting, and the circulation very much hurried, with strong action of the heart. This aggregation of symptoms, which we shall call the *prodrome*, increases by degrees, until, at the end of half an hour, the circulation becomes stronger and more irregular; the respiration more embarrassed; the extremities cold, as those of a dead body; and the trembling so violent that the patient would fall out of bed if he were not held. At this moment, that is to say exactly at noon, he feels as if struck by a jet of cold water, projected with force against his forehead; he makes a very deep inspiration, and becomes instantly insensible to external objects; he then merely utters horrible cries, followed by irregular contractions of the face, which had previously been in repose; the countenance also becomes covered with viscid perspiration.

Such was the condition of this patient when seen by Dr. Ceni in the hospital Della Vita; the first paroxysm which he had after his admission being the ninth from the commencement of the attack.—All appeal to the ear had become utterly useless, but the patient replied, and the convulsions ceased when the vibrations of sound were directed upon the epigastrium and the neighbourhood of the apex of the heart, a phenomena which attracted the earnest attention of M. Ceni, and induced him as well as another physician and many spectators, to repeat the experiment in various ways, and at different times.

Second Case.—The second case quoted by M. Andral was taken from the inaugural dissertation of Dr. Filassier, an *eleve interne* of the hospital. This thesis, having for its title, "Considerations on Animal Magnetism," was sustained in 1832. The author did not

know any thing of magnetism except from the article by M. Rostan, inserted in the *Dictionnaire de Médecine*. He was not incredulous, but sceptical [*"pas incrédule, mais sceptique."*] He one day took as the subject of experiment an *interne* of the hospitals, who was opposed to the doctrine of magnetism, and he produced on him the phenomena described below:—

I magnetised him (says M. Filassier) during twenty minutes: at first he experienced some stretching and yawning; his eyelids closed; the muscles of the body became relaxed; his respiration snoring; his head dropped to the left side; his face grew turgid; then, after a short time, he burst into a sardonic laugh, and groans of such a kind as led me and one of the bystanders to think that he was making game of us; but we were grievously undeceived, for his skin became covered with a cold and viscid perspiration; his pulse became rather more frequent, small, and irregular; his face was lengthened, greatly changed, and became blue; his head and body were drawn back by tetanic spasms; his breathing rattling, like that of a dying person, accompanied by convulsive hic-cough and moaning. My perplexity at this moment may be imagined—I cannot express what I suffered; I had magnetised for the first time, and knew not what remedy to apply. I suspended my operations, but still the symptoms increased to an extent that made me tremble. Among a thousand other thoughts which passed through my mind, that of continuing with more vigour than before the action I had begun to exercise, was the strongest. I did accordingly recommence with redoubled energy, and the phenomena above described passed into a profound collapse. I placed my victim on a bed, and waited with anxiety for the result, having my hands in his. The fainting lasted a quarter of an hour, after which he gradually came to himself, when his first words were, "you have made me horribly ill; I never suffered so much in my life; however, the effects have been extraordinary, and you must begin again." I was stupified, and refused, but he insisted with such earnestness that I was forced to consent. Yielding, however, to the fatigue which resulted from the violent efforts I had made, and still more influenced by reason, which pointed out the necessity of employing a proceeding different from the former, I exerted my volition with less intensity; I moved my hands with more gentleness and calmness; there was developed in me a timid benevolence and solicitude for my friend, whom I had made to suffer, and whom I wished to spare further uneasiness. His eyelids closed as before; a complete abandonment spread over all his muscular frame; his countenance became tumid, and assumed an expression of happiness difficult to describe; his skin was covered with a soft and gentle perspiration; his respiration became slow, deep, and calm. The words, "what happiness!—one cannot be happier in Paradise," burst from him. These expressions made me laugh, and this produced over his entire frame a general impression of suffering. "You hurt me," said he: I ceased, and the phenomena were suspended, occasioning uneasiness on his part, but were reproduced by my renewing the same actions as before,

which at length induced a gentle sleep, from which he spontaneously awoke at the end of twenty minutes. There remained some general lassitude and uneasiness, which were dissipated by a little repose at first, and followed by a turn or two in the open air.

I cannot attribute these phenomena to the influence of imagination; indeed, they manifested themselves in a young man of a grave and logical mind, a physician, and above all, an unbeliever. They were produced by a medical man and a sceptic.

Here, then, said M. Andral, are two capital cases, and which may admit of important application. The cause, under the influence of which the phenomena were produced, is evidently complex. In the first place, the imagination appears to have a large share in the effect; and we ought also to take into account the frictions in the course of the nerves. Who has not witnessed the effect of tickling, on irritable individuals? Again, in the former instance, we perceive that instinct of imitation which plays so important a part in the production of certain nervous affections. Nevertheless, this tripple influence does not suffice to account for all the phenomena presented by the subjects of the preceding cases. Must we then admit besides a magnetic influence in a particular agent? M. Andral candidly confessed that he had no fixed opinion on this point.

As to the rest, the existence of the phenomena of ecstasy is incontestible; to this is to be attributed the history of the mysteries, the oracles, the sybils, the pythonoses of Egypt and of Greece. In the middle ages they appeared again, but under the name of sorceries and demoniacal possession. The nuns of Loudun present us with analogous phenomena as well as the protestants of Cevennes, who fled before the persecution of Louis XIV. More recently these phenomena were seen under the guidance of Mesmer and the lordly patronage of Busang. Epidemic at different periods, they now appear sporadically. Many persons have occupied themselves with the subject, and in Germany there are several clinical institutions for magnetism. Have all the learned men who have directed their attention to the investigation been imposed upon by their illusions? It is, said M. Andral, what we cannot believe. The learned lecturer thinks, after mature reflection and much reading, that with many shameful practices and infamous juggleries, there are to be found and to be studied certain perturbations of the nervous system which may become the source of a great number of remarkable phenomena. We ought not to be in too great a hurry to say, "such a thing is impossible," for who can pretend to know the limits of possibility? Who can flatter himself that he has penetrated to their depth all the laws of nature? However, we ought also to distrust our love of the marvellous, which often influences us; and it is only with the greatest reserve that we ought to admit into scientific investigations new facts, which are foreign to all our knowledge of physiology and pathology.

M. Andral, without entering into a detail of the different magnetic proceedings, expressed his opinion that a certain number of phe-

nomena may be produced by magnetism applied *immediately*; but all the cases of magnetising from a distance appear to him to be extremely doubtful.

Among the phenomena produced in the former manner, the abolition of sensibility appeared to him incontestible. There exists a great number of analogous facts, recorded in the annals of science. The individual ceases to exercise any relation with the external world: he isolates himself completely from men and surrounding objects, and retains no recollection of what has passed during the sleep of magnetism. The history of epilepsy presents us with analogous phenomena: epileptics have been known to resume after a fit, the conversation they had begun at the moment of the attack. All such facts may be received without hesitation. The same may be said of the exaltation of the mental faculties, particularly of memory: somnambulists have even recovered the knowledge of languages acquired in their infancy; but M. Andral never knew any one really speak any language which he had never learned. As to seeing a fluid which escapes from the person of the magnetiser, M. Andral particularly dwelt upon the fact that this was never affected to be done except by those who maintained its existence when they were not under the influence of somnambulism.

M. Andral calls in question the faculty which has been claimed by somnambulists of perceiving the sound or diseased state of their own organs, or of those of another, and of applying to their diseases appropriate remedies: in this, said he, I see nothing but juggling, ignorance, and bad faith. Accordingly, all the somnambulists of the last century, a period at which these theories were prevalent, in all diseases saw nothing but bile and various humours in commotion, and their uniform precept enjoined their evacuation; so that emetics and purgatives formed the prescription in every case. At present, again, it is redness of the stomach and bowels which haunts their sight; and in accordance with this view, they prescribe leeches and gum-water. With regard to the faculty of seeing the interior of their organs, M. Andral has interrogated somnambulists on this point, and they have only replied by various absurd wanderings. Again, can these somnambulists indeed see without the assistance of their eyes—by the forehead—the occiput—the epigastrium? In answer to this question, M. Andral made an analysis of seven cases of this nature, which have been recorded; those guaranteed by Petetin, de Lyon, Deleuve, Delpet, Rostan, Felassier, &c. Of all these, the case related by M. Rostan, of vision, independent of the eye, alone appears to him at all made out. Nevertheless, as this case is unique, it is necessary to wait till the fact be repeated before it can be admitted as having a right to enter into the reasonings of science. The Academie Royale de Medicine devoted six years of investigation to the subject before they made their report, and could not establish a single fact of this nature.

In conclusion, M. Andral distinguished in what had been observed and written regarding animal magnetism, three series of facts. The first are undeniable, and are entirely within the domain of

physiology and pathology: the others require confirmation. The third set of cases are those conspicuously false. The professor acknowledged that he had been more sceptical in his last than in his first lecture, delivered some days before. During the interval he had devoted himself to the study of the cases; had analyzed and scrutinized them; and thus satisfied himself that a great number are unfit to bear examination. He concluded by applying to the discussion the words of the learned physician Muschembrock—“*pauca facta nos gloriosos et temerarios faciunt; innumerabilia nos ad conclusionem parant.*”—[*Med. Gaz.*

PHILADELPHIA COLLEGE OF PHYSICIANS.—ITS EARLY OPINIONS RESPECTING ARDENT SPIRITS.

As part of the history of Temperance Reform, and serving to show the opinions held even at that time by many estimable and learned physicians, we publish the following extract from the minutes of the College of Physicians of Philadelphia, for which we are indebted to its present Secretary, Dr. Bond.

On the 4th of September, 1787, it was resolved by the College of Physicians that a committee be appointed, consisting of Doctors Jones, Rush and Griffiths, “to draw up a petition to the Assembly of this Commonwealth, [Penn.] setting forth the pernicious effects of Spirituous Liquors upon the human body, and praying that such a law may be passed as shall tend to diminish their consumption.”

On the 6th of November, this committee made a report which was adopted, as follows, the following members being present:—

Doctors John Redman, *President*, John Jones, William Shippen, Jr. Adam Kuhn, Benjamin Rush, Thomas Parke, George Glentworth, James Hutchinson, Benjamin Duffield, Nathan Dorsey, Samuel P. Griffiths, Benjamin Say, John Carson, William Currie, William W. Smith, John R. B. Rodgers.

“*To the Honourable the Legislature of the State of Pennsylvania:*

The Memorial of the College of Physicians of the city of Philadelphia, Respectfully sheweth,—

That your memorialists have seen with great concern the numerous evils which have followed the intemperate use of distilled spirituous liquors in the State of Pennsylvania. They decline taking notice of the baneful effects of these liquors upon property and morals, and beg leave to confine this memorial to their influence upon the health and lives of their fellow citizens, and the population of their country.

That among the numerous diseases which are produced by the use of distilled spirituous liquors, they would only mention, the dropsy, epilepsy, palsy, apoplexy, melancholy, and madness; which too seldom yield to the power of medicine.

That where distilled spirituous liquors do not produce these terrible and obstinate diseases, they generally impair the strength of

the body, so as to lessen its ability to undergo that labour, either in degree or duration, which it is capable of without them.

That the prevailing ideas of the necessity and advantages of using distilled spirituous liquors to obviate the injurious effects of extreme heat or cold upon the human body, are altogether without foundation, and that they increase the evils, which they are taken to remove; That the inconvenience arising from excessive labour, heat or cold, are to be removed with much more safety and certainty by the use of cider or malt liquors.

Your memorialists, therefore, pray, that your Honourable House would take the facts herein stated, into their serious consideration, and as the guardians of the health and lives no less than of the liberties and morals of their constituents, that they would enact such a law, for the checking the improper use of distilled spirituous liquors, as to their wisdom and humanity may seem proper."

On the 7th of December, 1790, the college appointed a committee consisting of Doctors Jones, Rush, and Parke to draught an address to "be presented to the Senate and House of Representatives of the United States, praying them to take speedy and effectual means to discourage as much as possible the importation and use of distilled spirituous liquors." On the 27th of the same month the following Address was adopted and ordered to be presented.

"To the Senate and House of Representatives of the United States in Congress Assembled,

The Memorial of the College of Physicians of the city of Philadelphia respectfully sheweth,

That they have seen with great pleasure the operation of a national government, which has established order in the United States.

They rejoice to find amongst the powers, which belong to this government, that of restraining, by certain duties, the consumption of distilled spirits in our country. It belongs more peculiarly to men of other professions to enumerate the pernicious effects of these liquors upon morals and manners.—Your memorialists will only remark, that a great proportion of the most obstinate, painful, and mortal disorders, which affect the human body, are produced by distilled spirits—that they are not only destructive to health and life, but that they impair the faculties of the mind, and thereby tend equally to dishonour our character as a nation, and to degrade our species as intelligent beings.

Your memorialists have no doubt, that the rumor of a plague, or any other pestilential disorder, which might sweep away thousands of their fellow citizens, would produce the most vigorous and effectual measures in our government to prevent or subdue it.

Your memorialists can see no just cause why the more certain and extensive ravages of distilled spirits upon human life should not be guarded against with corresponding vigilance and exertions by the present rulers of the United States.

Your memorialists beg leave to add further, that the *habitual* use of distilled spirits, in any case whatever, is wholly unnecessary—that they neither fortify the body against the morbid effects of heat or cold, nor render labour more easy, nor more productive—and that there are many articles of diet and drink, which are not only safe and perfectly salutary, but preferable to distilled spirits for each of the above purposes.

Your memorialists have beheld with regret the feeble influence of reason and religion in restraining the evils, which they have enumerated. They centre their hopes, therefore, of an effectual remedy for them in the wisdom and power of the United States; and in behalf of the interests of humanity, to which their profession is closely allied, they thus publicly intreat the Congress, by their obligations to protect the lives of their constituents, and by their regard to the character of our nation, and to the rank of our species in the scale of beings, to impose such heavy duties upon all distilled spirits as shall be effectual to restrain their intemperate use in our country.”

Members present at the adoption of this address:—

Doctors John Redman, *Pres't.*, John Jones, *V. Pres't.*, Robert Harris, Nicholas B. Waters, Thomas Parke, William Currie, Benjamin S. Barton, Nathan Dorsey, Benjamin Rush, Michael Leib, William W. Smith, Adam Kuhn, Samuel P. Griffiths, *Sec'ry.*

A QUEER STORY OF A QUEER SNAKE.

In a late Ithaca, N. Y. paper, we find over the signature of a respectable citizen of that village, the following marvellous snake story. The writer says:—On Saturday afternoon, I was engaged with two of my sons and a hired man Reuben Havens, in clearing a small piece for a summer crop. Havens cut down a dry stump of a tree about 25 feet high; as it was falling, I perceived a striped snake about two feet long, crossing a stone about 15 feet from the foot of the tree. The tree fell on the snake and owing to its being a little flat on the lower side, or to the shape of the stone the snake was cut in three pieces as smooth as it could be done with a knife; the middle part remained mashed under the tree. If it had not been witnessed by four of us, and I had not the evidence of the fact to prove it, I would not dare to tell what followed. The part of the snake which had the head on, in about two minutes crawled under the tree to the tail end, which had worked itself to about a foot from the stone, in apparant agony. The head part immediately took the other part into its mouth, and fairly carried it under the stone, which was flat and about three feet over. All this was so singular, that I had the curiosity to make one of the boys watch the stone until we quit work at night. About three hours afterwards, when we chopped up the tree and with a handspike lifted the stone, we found the snake with the two cut ends joined together, and able to attempt making his escape—we however caught it. The cut was not entirely healed, but we carried it home, and I now have it well and sound in a box for any body to see, at my house, at about a mile from the village. The cut is entirely healed, and leaves a ring around the snake; and what is curious, the ends of the streaks on the two parts do not match.

JOURNAL OF HEALTH AND RECREATION.

PHILADELPHIA, JUNE, 1833.

**MINUTES OF THE PROCEEDINGS OF THE UNITED STATES
TEMPERANCE CONVENTION.**

[Duly Recorded and copied out by one of the Secretaries.]

Pursuant to an invitation of the American Temperance Society, the delegates appointed by the several Temperance Associations in the United States, assembled in Convention at the Hall of Independence, in the city of Philadelphia, on the 24th day of May, 1833, with the view to consider the best means of extending, by a general diffusion of information, and the exertion of a kind and persuasive moral influence, the principle of abstinence from the use of Ardent Spirit throughout our country.

The Convention was organized by the appointment of the following officers:—

President, Reuben H. Walworth, of the State of New York:

Vice Presidents, Roberts Vaux, of Pennsylvania; John Tappan, of Massachusetts; Timothy Pitkin, of Connecticut; Peter D. Vroom, of New Jersey; Judge Hall, of Delaware; John C. Herbert, of Maryland; Col. Lumpkin, of Georgia; William M'Dowell, of South Carolina.

Secretaries,—Mark Doolittle, of Massachusetts; John Marsh, of Connecticut; John Wheelwright, of New York; Lyndon A. Smith, of New Jersey; Isaac S. Loyd, of Pennsylvania; Judge Darling, of do.; Robert Brackenridge, of Maryland; Daniel W. Lathrop, of Ohio.

After supplication that the blessing of Almighty God might rest upon the labours of the Convention, and guide and direct it by his wisdom in all its deliberations, the Circular of the American Temperance Society calling the convention was read, setting forth the object for which it had assembled.

The names of the members from each State were then called, exhibiting in all 401.—

Of whom 1 was from Maine, 5 from New Hampshire, 3 from Vermont, 21 from Massachusetts, 7 from Rhode Island, 15 from Connecticut, 65 from New York, 42 from New Jersey, 139 from Pennsylvania, 11 from Delaware, 24 from Maryland, 11 from Virginia, 4 from North Carolina, 1 from South Carolina, 3 from Georgia, 11 from Ohio, 11 from Kentucky, 3 from Tennessee, 4 from Indiana, 6 from the District of Columbia, 3 from Michigan, 1 from Illinois, 1 from Missouri, and 1 from Alabama.

The room occupied by the Convention not being sufficiently large to accommodate its members, it was on motion—

Resolved, That Matthew Newkirk, Robert Earp and James Gray—be a committee to procure a more suitable place, and report to the present session.

Resolved, That all committees be appointed by the President.

Resolved, That a committee be now appointed, whose duty it shall be to prepare and digest business for the Convention, and report such subjects as in their opinion ought to claim its attention.

Resolved, That said committee consist of seven,—

Whereupon the following named gentlemen were appointed:—Justin Ed-

wards, of Massachusetts; Amos Twitchell, of New Hampshire; Charles Griswold, of Connecticut; Edward C. Delavan, of New York; Gerritt Smith, of do.; Hugh Maxwell, of do.; S. K. Talmage, of Georgia.

Resolved, That all motions be committed to writing and submitted without discussion to the committee to prepare business.

Resolved, That members of Congressional and State Legislative Societies be invited to a seat as honorary members of the Convention.

Resolved, That the deliberations of this body be each day opened with prayer.

The standing committee reported the following resolution, which, after amendment, was adopted.

Resolved, That the Convention meet each day during its session at 9 o'clock, A. M., adjourn at 1 o'clock, P. M. and assemble again at half past 3 P. M.

The committee to provide a place for the meetings of the Convention—Report, that they have obtained the fifth Presbyterian church, in Arch above Tenth street, whereupon it was

Resolved, That when this Convention adjourn, it adjourn to meet at this place, whence it shall move in procession, headed by its officers, to the place designated by the committee.

On motion adjourned.

Afternoon.—The Convention organized at the appointed hour, and in pursuance of the resolution adopted at the former session, proceeded to the fifth Presbyterian church.

The following resolutions reported by the standing committee were then considered and adopted with amendment.

Resolved, That no member of the Convention be allowed to occupy more than ten minutes in the remarks he may make before the Convention at any one time, and that he shall not be allowed to speak more than twice, on any subject or question without in either case obtaining the unanimous consent of the Convention.

Resolved, That notice be given in the Churches and newspapers of Philadelphia, that a Temperance meeting will be held in the city next Monday at half past 7 o'clock, P. M.—for the general attendance of the citizens and others.

The standing committee reported a series of resolutions, the following of which were severally considered, and after some amendments, adopted.

1. Resolved, That in our judgment it is the duty of all men to abstain from the use of ardent spirit, and from the traffic in it.

2. Resolved, That it is in our view expedient that all who are acquainted with this subject, unite with Temperance Societies.

3. Resolved, That we regard with peculiar satisfaction the formation of the American Congressional Temperance Society, and express our decided conviction that should similar societies be formed by the Legislatures of each State, they would greatly benefit our country and the world.

4. Resolved, That the regulation adopted by the National Government for discouraging the use of Ardent Spirit, in the Army and Navy of the United States, is a mark of wisdom and paternal care in the rulers of the people over the individuals employed in their service.

5. Resolved, That the abolition of the practice of furnishing merchant vessels with Ardent Spirit, or employing men who drink it to navigate them, would greatly promote the interests of the country.

6. Resolved, That Temperance Societies in all mechanical and manufacturing establishments, while they would promote the pecuniary interest of all concerned in them, would also in various ways promote the good of the public.

7. Resolved, That the formation of a Temperance Society in each ward of every city, and in each district of every county and town in the United States, would tend powerfully to complete, and to perpetuate the Temperance reformation.

8. Resolved, That each State Society be requested to take the direction of the temperance cause within its own limits, and to employ one or more permanent agents, to visit periodically every part of the State, and to devote their whole time and strength to the promotion of this work.

9. Resolved, That each family in the United States be requested to furnish themselves with some temperance publication.

10. Resolved, That the increase of temperance grocers, public houses and steam-boats, in which Ardent Spirit is not furnished, is highly auspicious to the interests of our country, and that the friends of human happiness by encouraging such establishments in all suitable ways, till they shall become universal, will perform an important service to mankind.

11. Resolved, That it be earnestly recommended to all emigrants who contemplate removing in a body from foreign countries to the United States, and also to those who contemplate removing from one part of our own country to another, before their removal to form themselves into a Temperance Society.

On motion Resolved, That the committee of arrangement appointed by the Pennsylvania State Temperance Society to provide for holding this Convention, be requested to make suitable provision for the meeting to be held on Monday evening next.

Resolved, That the committee to prepare business, be appointed to provide speakers for the meeting on Monday evening.

Resolved, That the reporters of the daily papers of this city be allowed a convenient place for their object in the Convention.

Resolved, That the Sexton of this church be appointed door-keeper to the Convention.

On motion adjourned.

SATURDAY, *May 25th.*—The Convention met at the stated hour, and was opened with prayer by Dr. Hewitt, of Connecticut.

The minutes of the preceding day were read and, with some alterations, approved.

On motion Resolved, That the Secretaries have power to make such verbal corrections in the minutes and Resolutions, as will best express their meaning.

The consideration of the remaining Resolutions reported by the committee at the former session was then resumed, and the following after some amendments adopted.

12. Resolved, That it be recommended to Temperance Societies and the friends of temperance of every description, to obtain as full and accurate statistics as possible, and embody them for the benefit of the community in

their Annual Reports—to be communicated at the simultaneous meetings—especially on the following points, viz:—

What is the population?

What number belong to Temperance Societies?

How many have been added to them the past year?

How many have renounced the traffic?

How many Groceries and how many Taverns in which Ardent Spirit is not sold?

How many continue to sell, and what quantity is now used?

How many drunkards have been reformed?

How many are now drunkards?

How many distilleries have been stopped, and how many are now in operation?

How many deaths is there reason to believe were caused by intemperance?

What proportion of pauperism and of crime is occasioned by strong drink?

How many criminals were committed the past year who drank no Ardent Spirit, and how many who did drink?

13. Resolved, That Temperance Societies and the friends of Temperance throughout the country, be requested to hold simultaneous meetings on the last Tuesday in February, 1834, to review what has been done during the past year, to consider what remains to be done, and to take such measures as may be suitable, by the universal diffusion of information and by kind moral influence, to extend and perpetuate the principles and the blessings of temperance, over our land.

14. Resolved, That a correspondence be opened with National Temperance Societies and friends of temperance in other countries—for the purpose of procuring as far as practicable, meetings at the same time, for the same purpose throughout the world.

15. Resolved, That Editors of papers and other periodicals who from time to time publish information on the subject of temperance are rendering important service to the cause, and should all Editors adopt and pursue a similar course, they would render themselves the benefactors of mankind.

16. Resolved, That the prompt and united testimony of many physicians to the hurtful nature and destructive tendency of Ardent Spirit has been a powerful auxiliary to the Temperance cause, and should that respectable and influential class of our citizens, all exert their influence to induce the whole community to abstain from the use of it, they would render themselves still more eminently useful.

17. Resolved, That it is expedient that the friends of Temperance in all countries unite their counsels and their efforts to extend the principles of Temperance throughout the world.

18. Resolved, That the fundamental and highly salutary influence which the promotion of the cause of Temperance must have on the purity and permanence of civil institutions, demand for it the countenance and active co-operation of every real patriot.

19. Resolved, That the influence of Temperance on the intellectual elevation, the moral character, the social happiness, and the future prospects of mankind, is such as ought to obtain for it the cordial approbation and the united, vigorous and persevering efforts of all the philanthropic and humane, of every class, age, sex and country.

The committee further reported the following resolution which was adopted,—

20. Resolved, That the associations of young men have been powerful auxiliaries to the Temperance cause, and should all the young men in the United States, and especially in the literary Institutions, unite in Temperance Societies, they would render themselves benefactors to our country and to the world.

The committee reported a resolution setting forth the object to be attained by Temperance Societies, which was under discussion when the time having arrived, the Convention adjourned.

Afternoon.—The Convention assembled at the appointed time—and resumed the consideration of the following resolution, reported by the committee at the former session—which, after deliberate examination, was unanimously adopted,—

21. Resolved, That as the *sole object*, of the American Temperance Society and those numerous State, and other Temperance Societies, which have been formed in accordance with it, throughout our country, *ever has been, is now,* and ever *ought* to be the promotion of *Temperance*,—to this object alone all their efforts ought to be invariably and perseveringly directed.

The committee reported the following resolutions, which were read and adopted,—

22. Resolved, That the Medical Profession be requested to inquire whether substitutes for alcohol may not be found, and its use be dispensed with in medical practice, and to give the results of their investigation to the public.

23. Resolved, That the influence of the female sex in favour of the Temperance cause, has had a highly salutary effect upon all classes in the community, and especially upon those who are the hope of future generations, *the children and youth*, and that should the influence to which they are so justly entitled, be unitedly and universally exerted in favour of this cause, they would do much to perfect and to perpetuate the moral renovation of the whole human family.

24. Resolved, That as the question has arisen among the friends of Temperance and Agricultural improvement,—What shall be done with surplus grains, provided they are not converted into Ardent Spirit?—The friends of human improvements be requested to investigate this subject, and to present the results to the public through the medium of the press.

On motion, adjourned.

MONDAY MORNING, *May 27th.*—At the stated hour the Convention organized, and was opened by prayer by Christian Keener, of Maryland.

The minutes of the preceding day were read and approved. Nicholas Deveraux, of New York, was appointed a member of the committee to prepare business in the room of Hugh Maxwell, who has left the city.

The committee to invite members to address the meeting this evening—Report that they have engaged—

G. S. Hillard, of Massachusetts; Thos. P. Hunt, of North Carolina; Thos. H. Stockton, of Maryland; ——— Lumpkin, of Georgia; Nathaniel Hewitt, of Connecticut.

The standing committee reported the following resolution—which was adopted,—

Whereas, it has been announced that Henry Newman, a delegate to this body from the British and Foreign Temperance Society, has arrived in this country, and expected to be at the Convention, but is providentially prevented, therefore, Resolved, That we cordially reciprocate the fraternal kindness manifested by the British and Foreign Temperance Society in the appointment of the above mentioned delegate, and express our earnest desire and hope that the mutual confidence now subsisting between Temperance Societies in this and other countries may be perpetuated and increased, till intemperance and its evils shall have ceased, and Temperance, with all its attendant blessings, shall universally prevail.

The President stated, that Stephen Van Rensalaer of the State of New York, had offered to defray the expense of publishing 100,000 copies of the proceedings of the Convention for gratuitous distribution—whereupon it was unanimously—

Resolved, That the thanks of this Convention be presented to Stephen Van Rensalaer, of the city of Albany, and State of New York, for his liberality in proposing to defray the expenses of distributing 100,000 copies of the proceedings of this Convention.

Resolved, That the President and Vice Presidents be a committee to communicate to S. V. R. the foregoing resolution.

The standing committee reported the following resolution which was adopted,—

Resolved, That the formation within six years of more than 6,000 temperance Societies, embracing more than a million of members, the relinquishment of the manufacture of Ardent Spirit by more than 2,000 distilleries, and of the sale of it by more than 5,000 merchants, the banishment of the poison from the United States' Army, and to a great extent from the Navy, the sailing of more than 700 vessels in which Ardent Spirit is not used, the hitherto unparalleled exhibition of more than 5,000 drunkards within five years ceasing to use intoxicating drinks, and becoming—as all drunkards if they take this course, will—sober men, and many of them highly respectable and useful men—the uniform and universal progress of the Temperance Reformation, and wherever suitable means have been used for its advancement, are, it is believed, facts which call loudly for fervent gratitude to the Author of all good, and for united and persevering efforts on the part of its friends, to extend universally and to perpetuate the Temperance cause.

A Resolution reported by the standing committee on the subject of a General Union, which was laid on the table at a former session, was now taken up, and on motion—Resolved, That the same be referred to a committee consisting of one member from each State represented in this body:—whereupon the following were appointed that committee, with instructions to sit immediately and report at the next session:—

Jos. C. Lovejoy, from Maine; Andrew Rankin, of New Hampshire; C. P. Walton, of Vermont; Mark Doolittle, of Massachusetts; Eli Ives, of Connecticut; Frederick A. Farley, of Rhode Island; John Wheelwright, of New York; ——— McLean, of New Jersey; Isaac S. Loyd, of Pennsylvania; Thomas J. Higgins, of Delaware; Christian Keener, of Maryland; W. R. Collier, District of Columbia; Ephraim Addom, of Virginia; Thomas P. Hunt, of North Carolina; Isaac W. Waddell, of South Carolina; S. K. Talmage, of Georgia; R. H. Bull, of Kentucky; John Seaward, of Ohio; Rob't. H. Chapman, of Tennessee; Peter Donan, of Missouri; N. M. Welles, of

Indiana; Enoch Kinsbury, of Illinois; E. C. Trowbridge, of Michigan; Wm. T. Brantley, of Alabama.

The standing committee reported a resolution which was under discussion till the hour for adjournment, when on motion the Convention adjourned.

Afternoon.—The Convention met at the stated hour, and again took up the resolution which was before it at the former session—which was adopted as follows:—

Resolved, That in the opinion of this Convention, the traffic in Ardent Spirit as a drink, and the use of it as such, are morally wrong, and ought to be abandoned throughout the world.

The committee to whom was referred the resolution on the subject of a General Union—Reported, That they had unanimously agreed to recommend the adoption of the Resolution, as reported by the standing committee, which was under consideration, when on motion the Convention adjourned—to meet at the Hall of the Musical Fund Society this evening, at a quarter before 8 o'clock, in order to lay before the public, who have been invited to assemble there—a brief history of the progress of the Temperance cause.

Evening.—At the time adjourned to, the Convention assembled at the place appointed—when

G. S. Hillard, of Massachusetts, Thomas P. Hunt, of North Carolina, Thomas H. Stockton, of Maryland, and Nathaniel Hewitt, of Connecticut,—presented to the very large and attentive audience that had assembled, a brief but impressive history of the Temperance cause, together with an exposition of the principles on which it is established.

After an appeal to the Female part of the assembly, by the President, the Convention proceeded to business,—the Standing Committee reported that they had no further matter to lay before the Convention—whereupon it was—

Resolved, That the Standing Committee be now discharged.

On motion Resolved, That the thanks of the Convention be presented to the Standing Committee, for the faithful and prompt discharge of the duties entrusted to them by the Convention.

Resolved unanimously, That the thanks of this Convention be presented to its President, Reuben H. Walworth, for the dignified, impartial and very acceptable manner in which he has presided over its deliberations.

The President here expressed his grateful sense of this acknowledgment on the part of the Convention, and his satisfaction in having presided over its deliberations, when he withdrew.—Roberts Vaux, Vice President, from Pennsylvania, took the Chair.

The Resolution reported by the Standing Committee and approved by the committee from each State, was then taken up, and after amendment adopted, as follows:—

Resolved, That the officers of the American Temperance Society, and of the several State Societies, are hereby requested to act as a United States Temperance Society, to hold mutual consultations, and to take all suitable measures to carry into effect the objects of this Convention, to embody public sentiment, and by the universal diffusion of information and the exertion of kind moral influence—to extend the principles and blessings of the Temperance Reformation throughout our country and throughout the world.

On motion Resolved, That the vital interests and complete success of the Temperance cause, demand that in all the efforts of the friends of that cause against the use of Ardent Spirits, no substitute except pure water be recommended as a drink.

On motion Resolved, That the thanks of this Convention be presented to the Select and Common Councils of the city of Philadelphia, for their kindness and liberality in granting to it the use of the Hall of Independence.

On motion Resolved, That the thanks of this Convention be presented to the Trustees and Congregation of the fifth Presbyterian Church, for the use of their house during the sittings of the Convention.

On motion Resolved, That the thanks of the Convention be presented to the Vice Presidents and Secretaries for the faithful discharge of their duties.

The Convention then adjourned *sine die*.

CORNARO'S DISCOURSES.*

We have had frequent occasion in the course of our labours to refer to the life and experience of Cornaro, as evidence of what may be done by a temperate course of living perseveringly adhered to, in restoring health and vigour to the constitution and in prolonging life, even when the powers of the system have been impaired by youthful excesses. The discourses of Cornaro, in which his views of a temperate life are set forth and enforced by the weight of his own example, have been often quoted by writers on hygiene—they have heretofore been inaccessible, however, to the general reader.—They are in fact so scarce even in the Italian, that it was only after a search of many years that we were enabled to procure a copy. We conceive, therefore, that Mr. Graham has conferred a favour upon the public by publishing an edition of the discourses, taken from a very excellent translation made in London in the year 1789. The work is an admirable recommendation and defence of “a sober and temperate life”—“it is,” to use the words of Addison, “written with such a spirit of cheerfulness, religion and good sense, as is the natural concomitant of temperance and sobriety. The mixture of the old man in it, is rather a recommendation than a discredit to it.”—When he published his discourses, Cornaro was eighty-one years of age, but as he himself expresses it, “perfectly sound and hearty.”

* Discourses on a sober and temperate life, by Lewis Cornaro, a noble Venetian, wherein is demonstrated by his own example, the method of preserving health to extreme old age. Translated from the Italian original. A new edition corrected, with an introduction and notes by Sylvester Graham. New York, 1833.

There are a few things it is true in these discourses, to which we cannot assent; they are entirely confined, however, to the author's mode of reasoning, and have nothing to do with his facts. Taken as a whole, no one can read the work without being benefitted—it will be found too that some of the specious objections now made to temperance, were maintained by persons whom Cornaro calls sensualists, contemporaries of his in the sixteenth century. The notes, introduction and appendix by Mr. Graham, are all written in his peculiar style, and in general are very judicious. As a specimen of the style of the author, we quote the following.

“These sensualists add, that a temperate life is such as no man can lead. To this I answer, Galen, who was so great a physician, led such a life, and chose it as the best physic. The same did Plato, Cicero, and Isocrates, and many other great men of former times; whom not to tire the reader I shall forbear naming: and in our own days pope Paul Farnese led it, and Cardinal Bembo; and it was for that reason they lived so long; likewise our two doges Lando and Donato; besides many others of meaner condition, and those who live not only in the cities, but also in different parts of the country, who all found great benefit by conforming to this regularity. Therefore, since many have led this life, and many actually lead it, it is not such a life but that every one may conform to it: and the more so, as no great difficulty attends it; nothing, indeed being requisite but to begin in good earnest, as the above mentioned Cicero affirms, and all those who now live in this manner.”

In the appendix, Mr. Graham presents two striking instances of the good effects of a Temperate life; existing in our own time and country.

The manifest importance of the subjects discussed, and their direct bearing on and application to every inhabitant of the land, seemed to require of us an account of the proceedings of the great National Temperance Convention. We have accordingly given them in an official form—that is the minutes duly kept and copied out by one of the Secretaries.

The two points which elicited the longest and most animated discussion in the Convention, were—1st, the nature of the disclaimer to be made against interference or collusion with any other plan or scheme of benevolence, or with any political party or sectarian creed whatever, and 2d, the declaration that the traffic in and use of ardent spirits as a drink, is morally wrong. Some of the delegates from the South,

advocated very strenuously the necessity of a distinct and formal disavowal on the part of the Convention of Temperance Societies in aught interfering with the relations between master and slave, or of these Societies, as such, taking any part in the question of abolition, colonization, &c. The Convention very wisely, and with good feeling, left the discussion of this subject to the gentlemen from the South, and mainly from their own showing and the admission of a majority of the latter, it was decided that it was inexpedient to make any distinct disclaimer on the question of slavery. If this were made, disavowals would be required of Temperance Societies taking part with masons, or anti-masons—or with the government, or the opposition parties. The introduction of the subject was in the main useful, as evincing the good feeling, and spirit of liberal concession, which the people of the North are willing to make to their sensitive Southern brethren; at the same time that the latter were not backward in drawing the line between their admission of an existing evil, and their determination not to have acknowledged rights, and long established usages—hastily and without good cause abrogated. The discussion, moreover, led to the introduction by the committee and the subsequent passage by the Convention of the resolution: That the *sole* object of the American Temperance Society and the numerous Societies which have been formed in accordance with its principles, ever has been, is now, and ought to be—the promotion of the Temperance Reformation throughout the world, and to this alone, should their efforts be invariably directed.

The resolution respecting the moral wrong done by the traffickers in, and drinkers of ardent spirits, elicited much discussion, but was ultimately carried in the affirmative by an overwhelming majority. It is believed that there were not more than ten negatives at the most to its adoption—and, with one solitary exception, the objection of the minority was, not to the truth of the opinion, but to the expediency of its formal promulgation by the Convention. In deliberately affirming this great truth, it was not intended at the time, nor is it intended by the friends of the measure generally, to denounce or accuse personally—any individual who chooses to infringe his duty in this respect. The truth is affirmed and proclaimed,—but its adoption cannot and ought not to be forced upon men. The affair is left to themselves. Their attention is directed to it, and the facts are placed before them. It is for them eventu-

ally to choose. What their choice will be, cannot long remain doubtful. Their acts will speak their conviction of the entire correctness of the resolution adopted by the Convention. The conduct therein referred to, is not a matter of indifference. If it be not morally wrong, it must be morally right;—and he is a bold man who shall affirm this latter proposition.

It has been alleged that the manufacturer and vender of ardent spirits, are no more responsible for the destructive effects of their use as a drink, than would be the maker of gun-powder for the injury it may cause; or the apothecary for vending a poison from his shop. The allusions are unhappy for the cause of the opponents of temperance, since such they are who contend for the moral right to make and sell spirituous liquors. In the first place then, gunpowder is used for the avowed purpose of destruction, either of man or beast—and always in the former case with inimicable intentions. Maker, vender and purchaser perfectly understand each other on this point. Nobody would think of gently singing a friend, or scorching his eyebrows and eyelashes, by igniting a few grains of gunpowder under his nose; nor could it be supposed that the gentlest pull of the trigger of a loaded pistol aimed at his breast, would be regarded as pleasant pastime. The known destructive effects of gunpowder call for, and obtain—a display of the greatest precautions wherever it is kept. Carelessness in this particular, would be regarded as either the extreme of idiocy, or as criminal, and would justify, in the former case, the appointment of a guardian and suitable attendants to be ever present with the unhappy individual; and in the latter—judicial investigation and penal punishments.

How stands the case with ardent spirits. It is not used to destroy an enemy, but as a mark of regard to poison a friend! The degrees of injury are various; but they are distinctly marked and evident, from the common allowance of a dram to a quart. Now we would ask whether there is any parallel to be drawn, on the score of infringement of the moral law, between the man who makes gunpowder, to be used for specific and avowedly hostile purposes, by persons who are well aware of its destructive nature;—and the man who makes ardent spirits, to be used under the show of sociability and friendship, by persons who are often ignorant of their poisonous nature until the mischief is done; that is until health has suffered, or life is lost, or a habit of confirmed drunkenness is ac-

quired. To establish a resemblance or close analogy between the two cases in their moral bearing, it ought to be shown that spirits were re-distilled until pure alcohol was obtained, and this again put away in magazines and stores, to be only brought out and used with great caution in a kind of ignited stream with rocket projection—for the destruction of an enemy or of something noxious and vile. On the other hand, the objectors to the question of distillers being morally wrong, ought to be able to show that the maker and seller of gunpowder would hold themselves free from all responsibility, when they learned, that the commonest method of using the article—was by children playing with it over a fire or a candle, and by men taking it home with them, to be daily sprinkled over flame, or often ignited in quantity so as to burn the clothes of themselves and families, often the houses and not unfrequently kill its inmates, or maim them for life. Would the manufacturer of gunpowder be exempt from the charge of moral wrong, if he were fully aware that such were its common use and daily effects. But what would be his reflections should he discover that this destructive article which maimed, killed and impoverished—which filled the alms-houses and jails with those who thus trifled and sported with it,—was, in fact, of no service for the purposes of personal or national protection against hostile attack.—What would then be his own conviction touching the question of his conduct being morally wrong. The answer is easily made.—Can a similar question touching the conduct of those who sell ardent spirits, the use of which, as a drink, is altogether deleterious and pernicious, and unattended by any compensating good, be answered differently.

The other illustration, in favour of the anti-temperance doctrines, derived from the apothecary not being responsible for the misapplication of, and the injury done by, poison purchased at his shop,—is also adverse to their cause. If a person buy arsenic from him under the plea of wanting it to kill rats, or to stuff and preserve the plumage of birds, and afterwards use it for criminal purposes, the apothecary is not responsible. But if the poison be sold to an ignorant man, who announces his intention to use it as a strengthener of digestion, or to cure disease on himself and his family; or to serve it up in an entertainment to his friends, would not the apothecary act morally wrong in this case. Now is not the vender of ardent spirits often as certain of their deleterious effects on both

mind and body when used for drink, as the apothecary is of the poisonous nature of arsenic when swallowed.

If the manufacturers and venders of ardent spirits, are not fully convinced in their own minds of the directly destructive results from the habitual drinking of ardent spirits,—we have no right to accuse their motives. If they are satisfied in their own minds of this effectually, we shall still refrain from making any charge. We leave the task of accusation to themselves.

THE BOOK OF NATURE.*

The Study of Natural History, is the study in a great measure of natural theology. By making us acquainted with the harmonies of created things, the wonderful adaptation of means to ends, of structure to function, it prepares us for a willing assent, a ready perception of the Divine wisdom, and of the provident and all guiding Creator. We gaze with delight on the variegated colours of the foliage and flowers of plants, and inhale with the intoxication of pleasure, the fragrance with which they fill the air. The animals of the field and the forest, in their varied garb, and form, and movements; birds with their brilliant plumage and melodious song; the finny tribe reflecting in their watery domain the colours of the rainbow;—all add to the charm of external nature,—all minister to our innate love of novelty. We feel at first as if the prospect would never tire, and that to stroll through valley, grove and upland lawn, gazing on these different objects would be unfailing pastime. But soon we desire to know the cause of the differences which we see in the different tribes of animated nature, and for what purpose has this claws and pointed teeth; that hoofs and grinders:—by what apparatus some so slow of foot are such admirable climbers—wherein aquatic fowls differ from those that live entirely on land:—by what processes and successive stages, the seed germinates, and the embryo plant is converted into a lofty tree with its cortical coverings, its umbrageous foliage and luscious fruit. We would know by what mechanism the sap or nutritive juice of the plant is carried often to so great a height from the root in which it was first formed, by imbibing moisture from the earth. With these and hundreds of other curious points we desire to become acquainted. The desire creates fixedness of attention, followed by a separation and classification of the different objects in nature; and, almost before we are aware of it, we find ourselves studying natural history. By no other study is the mind nourished so innocently and usefully, and with such unceasing variety. To few indeed are ample scope and opportunity given for its full prosecution. We must all depend in a measure on the labours and observations of others—as described in books, and illustrated in museums and drawings. Happy, therefore, is it for us when in our power to avail of these means; and thus with little trouble and cost to hold communion with nature, and to have the privilege of prying into her arcana under the guidance of her chosen sons. But why descant on the pleasure and hold forth the flattering picture of its en-

* Embracing a condensed survey of the Animal Kingdom, as well as sketches of Botany, Vegetable Anatomy, Geology, Mineralogy, &c. &c. &c. Embellished with numerous splendid engravings. Published monthly. Edited by an Association of Scientific Gentlemen of Philadelphia.

joyment, it may be asked, if the means of enjoyment are not within our reach. It is precisely because they are in nearly every person's reach that we now introduce the subject. The work, the title of which is prefixed to this article, will prove a good instructor and a pleasant companion, by first telling of the habits and peculiarities of the different classes of animals and plants, and then showing them to the eye in the form of finely executed engravings, which in number and variety would alone compensate for the price of the work.

We do not know who are the gentlemen on whom the proprietor has devolved the task of writing the letter press explanation of the plates, but we have been positively assured that they are every way competent to the discharge of the duties which they have assumed. We the more willingly give into this opinion, after a perusal of the introduction to the first number entitled "*The Study of Natural History*;" which is well written both in regard to the matter and manner. To the young of both sexes in schools, and to our collegiate youth, as well as to amateurs of natural history in general, the *Book of Nature* has especial attractions and claims for perusal. The intentions of the publisher are fully set forth in the following short preface.

"In presenting the public with an extensive work, which will embrace about two hundred and forty very elegant plates on Natural History, it may be necessary to remark at the outset, that the letter-press which accompanies them is entirely compiled from books of standard authority, and that the work is intended as an index, which, while it exhibits the objects portrayed in their natural form with their nomenclature, is principally designed to furnish good drawings, and ideas on Natural History. With the aid of the first, the learner will be enabled to pursue his studies without seeking for the living or stuffed specimen, while the letter-press will afford him the correct names of the animals, plants, birds, &c., and thus enable him to investigate their history, habits, &c., in the more voluminous treatises which contain them. One object with the publisher emphatically is, to place the plates within the reach of all at a rate so moderate that even the parlor scrap-book will lay it under contribution, and where no taste exists for the study of Natural History. This could not have been effected if the plates had been accompanied with an extended notice of each subject. The editor has therefore limited his manuscript to the prescribed space, in which, however, he has condensed such information as was thought to be most useful and intelligible. The plates are all prepared with reference to the Linnæan system, the improvements and modifications on which will be noticed in the letter-press."

We noticed, on its first appearance, *Greenbank's Periodical Library*. The second number begins the *Life of Peter the Great*, by Count Segur. Of this last work we can speak in terms of unmixed praise. The subject, and the reputation of the author, gave security in advance for its success. After this, was begun in the fourth number the *Tour through France and Italy*, by William Hazlit, which is continued in the fifth. It is written in a light and amusing style, and abounds in lively description. We must content ourselves on this occasion with an extract from the life of Peter the Great; it is part of an account of the trial and death of Alexis, by the Tzar, his own father, Peter the Great.

CONDEMNATION AND DEATH OF ALEXIS.

The grandees had heard the charge, and the confession of the criminal; he was the second personage of the empire, the individual

of all others whose actions could be the most useful or the most injurious: he was one of its defenders; yet, notwithstanding this, it was in the midst of terrible war, when the country, exhausted by so many sacrifices, though on the point of reaping the fruits of them, saw Austria and the North of Europe combining, in order to snatch them from her: it was at such a critical moment, that, deceiving his father and his sovereign, he declared himself his enemy, by deserting his political and military post, to throw himself into the arms of one of those powers, which was already jealous of the rising glory of the Russians!

The culprit had, it is true, been since disinherited of the empire; but his judges were doubtful whether his crime did not deserve death, as well in the eyes of justice, which look only to the past and the present, as in those of policy, which look also to the future.

And, in truth, at this epoch of Russian regeneration, was not the still cherishing a wish to destroy it, high treason against their country, no less than against their Tzar.

The accuser, the tone of the accusation, and all the attendant circumstances, gave sentence by anticipation. But, if they should dare to pronounce it, would Peter carry it into effect? They had no doubt of it. The civilization of his people was a work conscientiously undertaken: to that he had sacrificed sister, wife, a whole generation, and still more, and a thousand times, himself! Nor was it any longer a mere conception of his genius; it was already a living and perfect creation. They themselves made a part of the new nation; formed out of able foreigners, and the flower of the natives.

And nevertheless there had existed among them, for twenty-nine years, a being by whom it was reprobated and abhorred; he even threatened to destroy it in the blood of those superior-minded men who had hastened from all quarters, relying on the word of the regenerator. The rebel, it is true, was heir to the empire—was the son of their Tzar; but that Tzar was their creator; he was at least as much their father as he was of this obstinate being, whom, during eighteen years, he had fruitlessly laboured to reform.

The alternative was, indeed, an embarrassing one! On the one side is a nation, his own work; on the other, was a son! Towards which had he the most imperative duty to perform? Whether ought the many children of his genius, or the child of his blood, to gain the upper hand! Of these two creations, whose co-existence was rendered incompatible by the fault of one of them, which ought to be sacrificed to the other?

In truth, the question here no longer turned on a renunciation, disinherison, or even compulsory vows. The confession of Alexis had demonstrated their insufficiency! the mortal enemy of civilization might rise again from that religious death! It was necessary to join it to a political death, a physical death; in a word, death of all kinds! and, that barbarism might irrevocably perish along with this devoted victim, it was equally necessary that the greater part of the grandees who were engaged in that work of civilization, should co-operate in this great sacrifice.

Such, no doubt, were the ideas of their master; those on which he had meditated for five months, and which he believed to be inspired by Heaven itself: for they knew that it was from the foot of the altar, where he had lain prostrate for several days, that he had come to put his son into their hands.

They were slaves—they were judges in their own cause; and the flight of Alexis seemed to give to a fatal decree, dictated by reasons of state, the sanction of rigorous justice: they pronounced it.


Let history for a while suspend hers: attentive and immovable, let her keep her eyes fixed on this inflexible and most persevering of all geniuses, in this giddy and rugged road.

Alexis was condemned on the sixth of July, 1718. On the seventh, a report was spread, that, on his sentence being read to him, he fell to the ground in the most alarming state of terror, and desired to see his father. The latter, followed by all the *grandeės* of the state and of his court, went to receive his last farewell, and mingle his tears with those of his son. The rest is a mystery. The Tzar was seen to quit with a dejected countenance the apartment of the unfortunate Alexis, who expired some hours after having embraced his father.

Peter wept over the victim before he was immolated; he wept, too, over his coffin, which he himself accompanied. But the statesman remained inflexible in him. The ashes of his son were yet warm, they were still wet with his tears, when he loudly declared that his son, "the most insincere and ungrateful being that imagination could conceive, had been justly condemned!" He gloried in having made the sacrifice to the love of his people, as well as in having banished or put to death all his accomplices.

Four years after, fearing that, on his decease, the minority of the son of this victim might revive the hopes of his mother, and of the party of the ancient manners, he declared by a decree, (as Ivan III. had done in his letter to the Pskovians) "that the reigning sovereign was the absolute master to dispose of the throne to whomsoever he pleased."

In fact, it was not long before he crowned Catherine; doubtless, with the intention of preserving, when he should be no more, the great work of his life, by the reign of her who had been the companion of his toils, and by her being surrounded with *grandeės* who were interested in civilization.

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THE
JOURNAL OF HEALTH,
AND
RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, JULY, 1833.

[No. 11.]

CHOLERA.

Neither alarmists nor fatalists, we have on the one hand, in this Journal, refrained from working on the fears of our readers by exaggerated pictures of danger from cholera; and on the other have discouraged the idea, that the disease is a scourge from which there is little chance of escape, take what care we may. We have contended all along, that however we may admit the existence of a general deterioration or poison of the atmosphere, as the primary and predisposing cause of cholera, it is equally clear, that but for local and controllable causes and personal indiscretions, this kind of atmosphere would soon have its strength diluted and rendered comparatively harmless and inert. Cleanliness and ventilation of streets, yards and houses—cleanliness of person, regular hours of repose, temperance both in eating and drinking, suitable clothing—and it is only suitable when adapted to changes and vicissitudes of weather—will prove to be means of nearly entire exemption from the disease. When we speak of temperance in food, we mean not only the moderate use of all that is eaten, but also entire abstinence from those articles which give no strength to the frame from not being converted into chyle and blood; but which heat, irritate or directly poison. Among these we include crude, that is pithy and fibrous and stringy vegetable substances, mixed and made dishes of animal matters—and above all intoxicating drinks. Never was the voice of history more clear and distinct than when uttering the experience in all countries and climates—that the drunkard and the free drinker

of ardent spirits have been especially liable to the disease and, proportionately, in greatest numbers, died under it. From India to the pole, from the banks of the Ganges to those of the Mississippi; in all the intermediate regions and districts has this great and awful truth been proclaimed. Nor need persons, loth to abandon their vicious courses, even when disease and death are before them, ask what substitutes they should use as a drink for ardent spirits. There is but one universal drink every where furnished by nature and by nature's God—that drink is water. Substitutes indeed!—do men ask what substitute they shall use for a deadly poison—and is there a more deadly and more generally destructive one than ardent spirits, used as a drink. We would conjure those persons, who have hitherto been subjected to the habitual practice of drinking ardent spirits, not to tamper any longer with their health, their lives, their quiet in this life, their hopes of the next, by either continuing the practice or by listening to the language of sophists and deceivers, who may recommend them strong brandied and drugged wines as a substitute—especially that most detestable of all mixtures, the most adulterated vinous compound—the common port wine of commerce. Let not our fellow citizens wait till the pestilence is among them, and their fears prevent their taking any wise and decided course. Now is the time for action, for rallying round the standard of temperance; and for beginning, if they had not before been in the constant habit of doing so, the use of water as their sole drink.

RECOLLECTIONS OF THE CHOLERA.

The following graphic description of the cholera under the above title is from the pen of the *Ven. G. B. Mountain*, Archdeacon of Quebec.

Id quoque quod vivam munus habeo Dei.

According to the census taken in pursuance of the Provincial Act in 1831, the population of the City and Banlieue of Quebec amounted then, in round numbers, to something more than 28,000, of whom nearly 21,000 were Roman Catholics, very nearly 5000 of the Church of England, and the remainder (approaching toward 2,500) of other Protestant denominations. As far as has been hitherto ascertained, the whole number of deaths by cholera in the year following, has amounted to about 2,800. From these data, it would appear that the whole population has been decimated by the pestilence; but beside some increase of the resident population, on the one hand, it is to be taken into the account, on the other, that the *transient* population of the summer, (whatever proportion it may have borne to the whole,) furnished many subjects for the melan-

choly list—the disease having prevailed among such of the emigrants as landed, and among the sailors also in the port.

The number of interments by the ministers of the Church of England during the whole of the year 1831, was 382. In 1832, it was not far short of that number in the month of June alone, and in the whole year has amounted to 975. The total of interments from cholera among the whole Protestant population is estimated at 785. Upon the two consecutive days, however, mentioned in the sermon, (the 15th and 16th of June,) upon each of which upward of 70 were interred by myself, it appears probable that among the bodies sent from the hospital to the Church of England burial-ground, in the distracting confusion which then prevailed, there was a considerable proportion of Roman Catholics and very possibly were some Protestants of other communions. And there is no doubt that some persons have been buried without its being known where; and without any registration or particulars.*

Never can the scene be forgotten by those who witnessed it, which was exhibited in the dusk of one evening, at the Emigrant Hospital, before the forced exertions of some members and agents of the Board of Health had provided another building in the lower town, exclusively for the reception of cholera patients. A house opposite to the hospital had been engaged to afford additional accommodation, but the unfortunate subjects for admission came pouring in before arrangements at all sufficient could be completed, and the desertion, in one afternoon, of part of the servants who had been hired, rendered the attendance, before most inadequate, so miserably inefficient, that the passages and floors were strewed with dying persons, writhing under wants to which it was impossible to minister, some of whom, I believe, actually died before they could be got to a bed. The Health Commissioners, the head of the medical staff, and the first medical practitioners of the city were upon the spot together, and doing all they could, but how could their skill and judgment meet all the exigencies of such a moment? Women were met at the doors bewailing their affliction, who had come too late to take a last look at their husbands while alive: parents or children were surrounding the death-beds of those dear to them: patients were, some clamoring in vain for assistance, some moaning in the extremity of langor, some shrieking or shouting under the sharp action of the cramps;† friends of the sufferers were contending angrily with the bewildered assistants: a voice of

* The rule uniformly acted upon when it became practicable to observe more order and method, was that a card was placed at the head of each bed, specifying the name, country, religion, &c., of the patient, and the date of his admission. This card, after death, was nailed upon the coffin, before the body was sent away for interment.

† The delineations of poetry in representing either affliction or disease were, in many points, completely realized in the scene here portrayed; and in reflecting upon it since, the expressive description of Virgil has come into my mind:—

Lamentis, gemituque et fœmineo ululatu
Tecta sonant—

authority was occasionally heard enforcing needful directions, but quickly required in some other quarter of the establishment—a voice of prayer was also heard, and the words interchanged between the dying and their pastors were mingled with the confused tumult of the hour.—The clergy, in passing through some quarters of the town to visit the sick, were assailed sometimes by importunate competitors for their services—persons rushing out of the doors or calling to them from windows to implore their attendance upon their respective friends, and each insisting upon the more imperative urgency of the case for which he pleaded.

I have no reserve whatever, in mentioning my own part in these occurrences, because to suppose that the clergy are entitled to any extraordinary credit for not flinching from their plain and proper duty in such cases, seems to involve a supposition that men whose whole employment relates to the business of preparation for eternity, and who preach CHRIST as the resurrection and the life, are less expected to be armed against the fear of death than all the other persons who are engaged in visiting and tending the sick, and performing their various offices successively required after death. A medical man might argue in the same words, although not throughout used precisely in the same sense, as those which I have heard suggested for the use of a clergyman. These are cases in which I can do much less good than in other labours of my profession: many of them are almost hopeless, with respect to my doing any good at all. Is it right that I should consume my time and expose my life for the sake of such cases, when, if it is prolonged, I may be an instrument of saving many of my fellow-creatures?—There is indeed a canon which directs the clergy to visit their parishioners in sickness, if it be not known or probably suspected to be infectious. But the rubric of the prayer-book was framed in better days, which provides for the case “where none of the parish or neighbours can be gotten to communicate with the sick in their houses for fear of the infection,” and assumes it as a matter of course that their minister will visit them under those circumstances.

With respect, however, to the much agitated question of the contagious or infectious nature of the cholera-morbus, the obscurity of

as well as parts of the passage in Milton which depicts a scene exhibited in vision to Adam:—

* * * Immediately a place
Before his eyes appear'd, sad, noisome, dark;
A lazarus-house it seem'd, wherein were laid
Numbers of all diseased; all maladies
Of ghastly spasm or racking torture, qualms
Of heart-sick agony. * * *

* * * * *
Dire was the tossing, deep the groans: despair
Tended the sick busiest from couch to couch.

Despair was to be seen every where, as far as concerned the *recovery* of the sufferers. And sometimes despair of their *souls*. “It is too late,” they would sometimes say to the minister, themselves.

the disease in this and in all respects has been the subject of remark; and I am far from offering to lift a presumptuous hand to cut the entanglements of the Gordian knot, nor am I qualified to set the subject in a scientific light; but as it regards simply the courage called into action, in visiting the sick, it does not seem necessarily of a very high order, when it is recollected that the medical gentlemen who are constantly busy in contact with the patients; the clergy who, to talk with them to any purpose must, in many instances touch them and receive their breath close to their own;—the friends and attendants about them night and day, who relieve them by friction of the hand till they are themselves perspiring with open pores—and others who handle their clothing and bedding before and after death, *remained quite as exempt as any other classes of persons from the disease.*

That *this* disease may be propagated and made to adhere, in a manner, to particular places by causes which tend to generate diseases at large, appears sufficiently natural and is supported by a variety of instances which are known to have occurred.

The Roman Catholic clergy connected with the establishment of the seminary, gave public notice of the closing of that institution, in order to enable them to assist in the task of attending the sick, in which the whole body were unceasingly engaged. One after another, indeed, all the schools of the city were closed.

The conveyance of bodies to the burial-grounds in open carts piled up with coffins, continued after the Board of Health had provided covered vehicles for this purpose, (attached to the hospitals, but disposable for the same service elsewhere,) from the unavoidable insufficiency of the provision. I saw upon one occasion, twelve bodies thus conveyed, from *one* hospital and at *one* time, to the *Roman Catholic* place of interment *alone*. Many fables were abroad among the lower orders, respecting persons said to have been buried alive, in consequence of the order for their interment within a certain number of hours. It is a fact, however, that the hospital-servants were in the act of taking an old Englishman from his bed to the dead-house, when some sign of life appearing, they brought him back, and he ultimately recovered. This I had from his own lips. One of the Roman Catholic Clergy also informed me that a person whom he had visited was found to be alive, after being laid in his coffin, but died shortly afterward.

The symptoms, in general, were much less horrible, although the disease, I believe, was equally fatal, among children. I do not remember to have seen an instance in which they were affected by the cramps. I saw two little things of the same family, lying, one day, in the same bed, at the hospital, to die quietly together, like the babes in the wood.

In some instances the hand of death produced very little immediate change of appearance. I recognized a man one day in the hospital, whom I had visited the day before at his lodging; and upon my coming up to speak to him, the apothecary said to me, "Sir, that man is dead." His eyes were quite open.

It was one of the characteristic occurrences of the time, that boards were put in various quarters of the town with the inscription, COFFINS MADE HERE.

I remember seeing one day at the foot of Mountain-street, a coffin containing a body, let down from a high garret, on the outside of the house, by ropes. It had never passed probably in the mind of the unfortunate lodger, that the stairs by which he gained his lodging, would not afford passage to him for leaving it, in case of death. I was informed of a similar occurrence at another house, where the coffin burst open.

I have mentioned the case of a drunkard smitten in the street, in a state of drunkenness. I saw him siezed by the cramps, and with the assistance of a couple of health-wardens, got him conveyed to the Emigrant's Hospital. His wife, who was also intoxicated, made violent resistance to his removal. It was, I think, a day or two after this, that the Cholera Hospital was opened. Upon my going there, the first person to whom my attention was directed, was this woman. She was then dying. They left two orphans, who were afterward received into the Female Orphan Asylum.

I was once attending to bury a young man who had died of cholera, after having just obtained a decent situation in a mercantile house; and while I was still over his grave, an affectionate letter from his sister, in Europe, was put into my hands, which had arrived too late for him to read it. She reminded him that perhaps *before that letter could reach him*, himself, or some of the persons interested about him, might be *mingling with the clods of the valley*. She earnestly conjured him to abstain from the seductive poison, which it appeared, he had used imprudently before.—I believe that he had not been guilty of intemperance in Quebec.

I have been assured that some men were brought into hospital, having been picked up in the streets under the supposition of being affected by cholera, but found to be only what is vulgarly called *dead drunk*; and that the same individuals, having been discharged as soon as sobered, again gave themselves up to drinking, and were brought in under no false alarm, a second time, but actually sick, and that unto death, of the disease.

In the early part of August, when the pestilence had much abated, the Bishop held a visitation of the Clergy, at Montreal, which, in the earlier stage of the calamity, had been postponed. I was appointed to preach the Visitation Sermon, and of course left Quebec for that purpose. Upon my return, I was in company in the steam-boat, with an unfortunate gentleman, who had lost himself by habitual excess. He was at the breakfast-table with the other passengers, on the morning of the second day. A few hours afterward, on that same day, his corpse was sewed up in sacking, and thrown overboard with weights attached to it, in conformity with the orders of the Board of Health. I read over the body part of the burial service appointed to be used at sea, with some slight adaptation to the case. I had been with him in his dying hour, and it was one of the worst cases that I witnessed. He could scarcely articulate;

but, in broken half-sentences or single words, was every instant importunately crying for something to assuage his thirst, tossing and turning at the same time, without the respite of a moment. A kind of half-mucilaginous drivel streamed profusely from his mouth. His countenance was ghastly, and his skin clammy in the extreme; and the short work of this wonderful disease was exemplified (as in other cases) by his having the appearance of a person reduced and worn by the severe action of some long-continued illness. After his death, the Captain of the boat proceeded to take a kind of inventory of such effects as he had on board. Among these was a snuff-box, with a representation upon the lid, of some figures carousing at a table, and a stanza from a drinking-song beneath.—*Ah!* said the Captain, *that is the song that he was singing when he came on board yesterday.*

It was a horrid death. I cannot say that the unhappy man could be called *impenitent*—if the term penitence can be applied to the distress of mind under which he laboured. He seemed alarmed about himself, and very anxious that something or other should be tried in behalf of his perishing soul. When I first went in, he was able to say, *I am a dead man.* He afterward put his finger to his open mouth, as a sign, and uttered the single word, *sacrament*, the administration of which was, of course, utterly out of the question, and I believe that I succeeded in turning him from such an idea.* A minister can hardly be placed in a more painful situation. He can hardly pray with hope; and without hope, he can hardly pray with faith.

Should this publication fall into the hands of any person upon whom a habit of undue indulgence in liquor is gradually stealing, let him be warned by these fearful examples. And oh! let those who live by selling what so often carries ruin to soul and body, consider well their own case!

There was another case of cholera among the female passengers in the steerage, but the woman recovered, and is now living.

The unfortunate gentleman, mentioned above, did not belong to the Province.

It was a remark that I often made during the continuance of the cholera, how little the face of nature betrayed the sadness of the time, or showed any symptoms of that principle of death which was in such fearful activity among the delegated lords of creation. I was particularly impressed with this kind of feeling upon some of the lovely summer evenings, on which I officiated at the burial-ground, then still unenclosed. The open green, skirted by the remains of a tall avenue of trees, and contiguous to the serpentine windings of the River St. Charles, beyond which you looked across meadows, woods, and fields dotted with rural habitations, to the mountains which bound the prospect, the whole gleaming in the

* It was impossible to suppose that his desire for the Sacrament was prompted by his having in that moment clearly apprehended a proper interest in the sacrifice which it represents.

exquisite and varied lights of a Canadian sunset, formed altogether a beautiful and peaceful landscape, and seemed a "fit haunt of gods." How melancholy and striking the contrast with all that had been deposited, and which it remained to deposit, in the spot upon which I stood! How full of deep reflection upon the ravages of SIN! How coupled with deep thankfulness to HIM who came to repair those ravages in the end, and to "make all things new!"

ON HYBERNATION, OR THE WINTER SLEEP OF ANIMALS.

In a very interesting paper on Hybernation, Dr. Marshall Hall remarks that there is a strong analogy between this singular state and that of ordinary sleep, the former being only a much exaggerated condition of the latter. In both, the necessity of breathing is lessened; Messrs. Allen and Pepys first established the truth of this, in reference to ordinary sleep, and it is very probable that muscular irritability becomes at the same time more energetic, just in the same manner as in hybernation. These phenomena are more obvious in the ordinary sleep of the hybernating, than of any other animals; for example, Dr. Hall observed a bat while asleep, and found that its respiration became very imperfect; that its temperature was only a few degrees above that of the atmosphere, and that it might be kept under water for 11 minutes without injury to life. Similar observations were made upon hedgehogs: while active, their temperature was 95, while asleep it was only 45°, that of the atmosphere at the time being 42° or 43°. The experiment was the more striking when one hedgehog was asleep, and another was lively, in the same box: the temperature of the former was ascertained to be 49°, and that of the latter to be 87°. Similar results were obtained in many experiments on dormice. These animals awake daily in moderate temperature, eat and then fall into a state of sleep; during which the respiration is very imperfect, and the heat of their bodies is little higher than that of the atmosphere.—From these statements it appears that the ordinary sleep of hybernating animals is, as it were, intermediate, and forms a link in the chain of resemblance between the sleep of the other mammalia, and the state of perfect hybernation. When a hybernating animal is asleep, their need of respiration is much more lessened, and their temperature falls much lower than in their active state; now this sleep probably passes into true hybernation as the blood which circulates through the brain becomes more venous, and as the irritability of the heart becomes more exalted. Our readers will now perceive the great importance of ascertaining exactly the state of hybernating animals, in reference to sleep. When observations on the temperature of these animals are very carefully made, we have seen that, in the course of an hour or two, their heat may vary 30 or 40 degrees. The experiments of Mr. Hunter, and more recently of Dr. Edwards, are faulty in this respect; as we are not informed whether the animals were quite lively, or dormant, or recently recovered from a dormant state: the hybernating animal, in a state of

activity, is quite another vital being, from the same animal in a state of dormancy.

1. *Of the Respiration during Hybernation.*—That this function is very nearly suspended, is inferred from the following facts;—we cannot detect any movements of breathing; the air of the pneumatometer, in which the animal is confined, is scarcely changed; the temperature of the animal is the same as that of the atmosphere; and lastly, it is capable of supporting, for a great length of time, the entire privation of air. When a bat, or hedgehog, in a state of hybernating torpor, was carefully watched, no alternate movements, either of the chest or of the abdomen, could be perceived; but the least touch, the slightest shake, immediately caused the bat to commence the alternate acts of breathing, and the hedgehog to take in several deep and onerous inspirations. As to the effects on the air in the pneumatometer, the result of Dr. Hall's enquiries is, that a bat in a state of hybernation, which was kept in for ten hours, did not sensibly affect the air; whereas the same animal, when active, absorbed or converted 5.8 cubic inches of oxygen into carbonic acid, in the course of one hour.

It may be a question, whether the slight changes which we find to have taken place in the air, during some experiments, are referable to the cutaneous respiration. Dr. Hall very properly remarked, that this point is not very easily settled, because we are not positively to infer that the play of the lungs has entirely ceased, although we cannot appreciate it; there may still occur a slight diaphragmatic breathing. In judging of the temperature of an animal in a state of hybernation, the greatest caution is requisite, to avoid all disturbance of it, as the least motion will sometimes induce respiration, and the consequent evolution of animal heat. Dr. Hall details the results of 32 observations; in 29, the temperature of the animal was precisely the same as that of the atmosphere; and in the other three, it exceeded the latter only by half a degree: we may therefore assume, as an established fact, that the heat of animals, during hybernation, follows that of the atmosphere. It is singular to observe the very rapid elevation of the heat, when there is the slightest restlessness of the animal; a change from 48° , to 80° or 90° , is often observable in the course of an hour. Dr. Hall considers that Dr. Edwards has fallen into a great mistake, when he compares the young of those animals which are born blind, and which, he discovered, were less capable of resisting cold than the young of other animals (vide Review of Dr. Edwards' Researches, in our last number) to the hybernating animals. Under no circumstances do the former possess the power of evolving sufficient heat to maintain their requisite temperature; whereas the latter, when in a state of activity, preserve a uniformly elevated temperature: it is only when the animal is disposed to sleep, whether ordinary or hybernating, that the temperature begins to sink. The last proof of the almost total cessation of breathing during hybernation, is the capability of the animal to live for a considerable period in noxious

gases, and even under water. Spallanzani narrates an experiment, in which he confined a marmot and a bat for four hours in carbonic acid gas, and yet they lived. Dr. Hall immersed a Hedgehog and a bat in water of 41° ; the former was kept 22 minutes, the latter 16 minutes, under the surface, without any injury to them. Now these animals, when active, are as speedily asphyxiated by drowning as any other of the mammalia; at least, such seems to be the case, according to Dr. Hall's experiments, in which he found that a hedgehog was killed in three minutes, from the time of immersion. Our author, therefore, differs from Sir A. Carlisle, and Dr. Edwards, when they assert that "animals of the class mammalia, which hybernate, have at all times a power of subsisting under a confined respiration, which would destroy other animals, not having *this peculiar habit.*"

2. *Of the Irritability during Hybernation.*—The very circumstance of the animal's living when deprived of atmospheric air, is an argument that their irritability or tenacity of life must be much increased; and this is powerfully confirmed, by finding that the heart continues to beat regularly for at least 10 hours, after decapitation and the destruction of the spinal marrow. A comparative experiment was performed on a hedgehog in its active condition; the spinal marrow was simply divided at the occiput. The beat of the right ventricle continued upwards of two hours—that of the left one ceased almost immediately; the left auricle was motionless in less than a quarter of an hour, and the right auricle had ceased to beat long before the right ventricle. It has been often asserted that the contractility of the voluntary muscles is impaired during hybernation; this, Dr. Hall says, is quite erroneous, and the mistake has arisen from authors confounding the lethargy of hybernation, with the torpor which is induced by extreme cold. We have only suddenly to arouse a bat or a hedgehog from their hybernating state, and we shall find that the former speedily flies about with great activity, and the latter walks about and does not stagger. In short, the phenomena observed are similar to those of awakening from ordinary sleep.

2. *Of the sensibility.*—Dr. Hall states that all preceding authors have committed a great error, in supposing that the sensibility of animals during hybernation is diminished; in truth, it is quite as perfect as in ordinary sleep; the slightest touch of one of the prickles of a hedgehog is sufficient to arouse it; and the gentlest shake causes a bat to respire. The sensorial functions are, indeed, nearly suspended; if a hedgehog, in its active state, be thrown into water, it immediately uncoils itself and betakes to swimming—in the hybernating state, on the other hand, no fear appears to be excited, and the animal would probably remain still and quiet for a very considerable period, if its sensibility were not acted upon by the contact of the water.

4. *Of the Circulation.*—Dr. Hall, by a nicely-contrived experiment, was enabled to examine the circulation in the wing of the bat, in its state of hybernation; he found that, although the animal did not perceptibly breathe, the circulation continued uninterruptedly; the number of pulsations in the minute was about 28° . All the blood is venous, and the curious fact is, that the left side of the heart, and also the arterial system, are now veno-contractile. This phenomenon is one of the most remarkable in physiology; it accounts for the life of the animal being independent of respiration, and is, in short, the key to the right explanation of the susceptibility of some animals taking on the hybernating state, and of the insusceptibility of the great number.

5. *Of the digestion*—The bat does not shew any disposition to awake for the purpose of taking food during its continued hybernation; neither are any excretions passed. External warmth, or any excitement, is the only stimulus which arouses it. On the other hand, the hedgehog, if the temperature be about 40° or 45° , awakes every two, three, or four days to take food, and it then returns to its state of lethargy; under similar circumstances, the dormouse awakes daily. Hunger is, therefore, probably the stimulus which induces the animal to awake at intervals.

Having now considered the condition of the leading vital functions during hybernation, we can be at no loss to perceive the marked difference between this state, and that of torpor from extreme cold. We have seen that the muscles do not become stiffened and incapable of motion—that the nerves are not benumbed and paralysed, and that hybernation is a salutary change, and one conducive to the preservation of life; whereas continued torpor from cold, as is well known, generally proves fatal. Indeed we shall find that, when a hybernating animal is subjected to great cold, without any means of increasing and retaining its warmth, it often remains in a state of activity, while others of the same tribe, which are provided with wool or straw to make a nest for themselves, speedily become lethargic. It is, therefore, moderate, and not extreme cold, which disposes to true hybernation. During the Winter months, they seek some secure retreat for nests or burrows, or congregate in clusters; and, if the season is unusually severe, many are found to perish from the cold. Let these particulars be, therefore, well remembered, in order that we may not, in future, mistake the phenomena of torpor from cold for those of true hybernation. In one respect only do these two states agree, and that is, in the dangerous and often fatal consequences of overspeedy reviviscence; if the respiration of an animal, lethargic from hybernation, be suddenly restored and kept permanently excited, the effect is very often the death of the animal.

Recapitulation.—The following conclusions contain the essence of Dr. Hall's observations:—

1. The natural sleep of hybernating animals differs greatly, but only in degree, from the sleep of other animals.

2. This sleep passes insensibly into the state of true hybernation, which becomes more and more profound as the blood loses its arterial qualities.

3. The respiration and evolution of heat are nearly suspended during hybernation.

4. The irritability of the heart and arteries is singularly augmented, so that they become veno-contractile.

5. The sensibility and general muscular motility are unimpaired.

6. The phenomena of true hybernation are very different from those of torpor from cold.

7. Severe cold, like all other causes of pain, rouses the hybernating animal from its lethargy, and, if continued, induces the state of stupor.

8. The phenomena of hybernation are attributable to the susceptibility of the heart and arteries to be stimulated by venous blood, and to the various organs of the body becoming much more irritable than during the state of the ordinary activity of the animal.—

Philosophical Transactions.

A once popular but now forgotten Essayist thus describes his wishes. They indicate much good sense, and their attainment is within the power of almost every one, who is willing to act with common prudence.

Were I to describe the blessings I desire in life, remarks the writer to whom we have referred, I would be happy in few, but faithful friends. Might I choose my talent, it should rather be good sense than much learning. I would consult in the choice of my dwelling, convenience rather than splendour; and for my circumstances desire a competency rather than a fortune. Business enough to secure one from indolence, and leisure enough to have always an hour for recreation or for rest. I would have no master, and I desire but few servants. I would not be led away by ambition, nor perplexed with disputes. I would enjoy the blessings of health, but would rather be indebted for its continuance to a regular and active life, and an easy mind, than to any disciple of the school of Hippocrates. As to my passions, since we cannot be wholly without them, I would hate only those whose manners and actions render them odious, and love only the virtuous and the kind. Thus would I pass cheerfully through that portion of my life, which is the prelude to death, and with resignation wait for that which will last forever.

FOOD AND DRINK OF THE ANCIENT IRISH.

In the twelfth century the Irish had two meals a day; the first in winter, was taken before day; the other and principal one, always

late in the evening. Stanihurst must allude to the richer and more civilized, when he tells us, they reclined, at meals, on beds. For Sir John Harrington, writing in 1599, has these words, "Other pleasant and idle tales were needless and impertinent, or to describe O'Neal's fern table and fern forms, spread under the stately canopy of heaven." Their candles were peeled rushes, enveloped in lard or grease; as in other countries, they were placed in lamps of oil. The Irish were insatiably fond of swine's flesh, and so abundant was it, that Cambrensis declares he "never saw the like in any other country;" he notices particularly wild-boars. These the people of the North of Europe esteemed their highest luxury, hence we need not wonder at their attracting them to this isle. A guest of O'Neal asked one of his guards, whether veal was not more delicious than pork? That, answered the other, is as if you asked me whether you were not more honourable than an O'Neal. As they but imperfectly boiled or roasted their meat, it was filled with crude juices, and produced the leprosy in those who ate of it. The leprosy was in fact a very common disease formerly in Ireland; Munster had many leper houses—the prevalence of this affection has been observed among other people with whom pork constituted the principal article of diet. The Irish believed that the bad effects of this and of every other ailment were to be effectually corrected by the use of aquavitæ. It was about the middle of the twelfth century, that the distillation of ardent spirit was introduced into Europe. For some time it was employed only as a medicine, and its effects in preserving health, prolonging life, dissipating humours, strengthening the heart, and in curing colic, dropsy, palsy, ague and a host of other diseases was firmly believed on the faith of physicians.—This caused it to be eagerly sought after, and hence its deceptive title of *aquavitæ* or *eau de vie*, that is, the water of life. At what time this liquor reached Ireland is not ascertained. When it did, however, it received an equivalent appellation, that of *usquebaugh*, *usquebah*, or simply *whiskey*. From Stanihurst it would appear that at first it did not constitute a common drink, but was employed in small quantities medicinally; for Spanish wine was in great request, in exchange for which, the Irish gave their peltry, at that time almost their only riches. Moryson says they preferred their own *usquebah* to the English *aquavitæ*, because they mingled with it raisins, fennel seed, and other ingredients, which was thought to mitigate its heat, and make it more pleasant, less inflaming, and more refreshing to a weak stomach. From hence it appears, the Irish themselves distilled a spirit from malt as early as 1590, and imitated foreign *liqueurs* by adding aromatic seeds and spices, as was practiced in France as early, according to Le Gland, as 1313. The Irish *bulcaen*, Ruttly tells us, was made from black oats. Its name from *buile*, madness, and *ceann* the head, indicates the violent effects of this fiery spirit. The nectar of the Irish was composed of honey, wine, ginger, pepper, and cinnamon. It was called *piment*. The French poets of the thirteenth century speak of it with rapture as being a most delicious beverage. They regarded it as the very per-

fection of human ingenuity; the union of the juice and spirit of the grape, with the perfume of foreign aromatics, so highly prized, in the same liquor.*

THE EFFECTS OF ARTS, TRADES, ETC. ON HEALTH.

Bleachers are exposed to chlorine both in inhalation, and by often standing for the whole day in water strongly impregnated with this gas. They work in open sheds, and are occasionally employed in the field, spreading out the yarn. They are healthy and strong.—None are affected with rheumatism. They live to a good age.

The *brass-founders* suffer from the inhalation of the volatilised metal. In the founding of *yellow* brass in particular, the evolution of oxide of zinc is very great. It immediately affects respiration: it less directly affects the digestive organs. The men suffer from difficulty of breathing, cough, pain at the stomach, and sometimes morning vomiting. The brass-melters of Birmingham state their liability also to an intermittent fever, which they term the brass-ague, and which attacks them from once a month to once a year, and leaves them in a state of great debility. As a preventive they are in the habit of taking emetics. They are often intemperate. In Leeds we did not find one brass-founder more than forty years of age; though we have since been informed that there are two brass-founders in the neighbourhood, of the ages of sixty and seventy, who have continued at the employ from boyhood. The *turners*, *filers*, and *dressers of brass*, if confined to this metal, do not seem to be more unhealthy than the generality of our townsmen. We observe, among the filers, the hair of the head changed to green.—This I suppose to result from the oil of the hair combining with the copper in the brass particles.

Gilt-button-makers, in the *casting* department, are subjected not only to great heat, but to rather severe effects from the fumes of zinc. These are giddiness, headach, sickness, reduction of the appetite, and bilious disorders. The men have the appearance of ill health; forty-five is about the average duration of life. In this, however, as well as other baneful occupations, it is difficult to determine the proportion of evil which the employ and intemperance respectively produce; for labour that distresses is generally well paid; high wages admit considerable intervals of rest and leisure; and leisure, by most uneducated workmen, is spent happily only at the alehouse. In *gilding*, the temperature of the rooms is 110° to 120°. But the principal evil is the mercurial vapour. Reduction of appetite and of sleep, trembling of the limbs, soreness of the gums, and disorder of the bowels are the common effects. At Birmingham, the women employed in this department begin their work at 10 a. m., and leave it at 5 p. m. They seldom live to full age.

Comb-makers, exposed to a disagreeable odour from the bullocks' hoofs, are healthy and long-lived.

Engravers fix the trunk and limbs more than almost any other

* *Ledwick's Antiquities of Ireland.*

operatives. The head is brought forward, and the eye intensely and long occupied with objects generally so small as to require a strong artificial lens. In one part of the process, the engraver is subjected to the annoyance of nitrous fumes, but this is only occasional. The posture and confinement affect the head, but more frequently, and more considerably, the organs of digestion. Sometimes the appetite is reduced, almost always the action of the bowels is greatly impaired. Organic diseases, however, of the abdominal viscera are by no means so frequent as in many other sedentary occupations, tailors and shoemakers for instance. This I attribute to the less general intemperance of engravers. The employment affects vision. Young men, for a short time after removing the lens, are unable to judge accurately of the relative size of objects, even at a foot's distance. And the eyes of old engravers are considerably impaired, both as optical and vital instruments.*

Preparers or dressers of hair—men, women or boys—are in an atmosphere of dust and stench, especially when employed on the foreign article. The winnowers suffer most. The complexion is soon rendered pale, the appetite reduced, the head affected with pain, respiration impeded, cough and expectoration established, the body emaciated. I scarcely need add, that life is sacrificed to a continuance of the employ. In most baneful arts and occupations the wages are high; but here we find with surprise, that the winnowers does not earn more than 4s. 6d. or 5s. a week. For what a pittance is health broken and life destroyed! But why should the winnowing be effected by hand at all? Why not employ machinery to turn the fan? or why not collect the dust in a box, and carry it off through a wooden chimney by the current from the fan? Few persons, indeed, are employed in the dressing of hair, and fewer are acquainted with their situation and suffering. This may palliate, but cannot excuse the neglect.

The *manufacturers of white lead* are subjected to its poison, both by the lungs and the skin. The dust and exhalation are most from the white-beds and the packing; little from smelting. There is only stench from the grinding, and neither dust nor smell from the blue-beds. Such, at least, was the statement of the managers of an establishment at Hull; for we were not permitted personally to inspect the process, though we examined the men. In several departments the heat is such as to produce sweating. Drinking, however, is less than in many other hot employments; and white-lead preparers are not, as a body, intemperate. In all departments the men and women are sallow and thin, and complain frequently

* Mr. B., now about the age of 60, was closely employed in engraving for 30 years. His right eye, that which he applied with a convex lens to his art, is considerably more prominent than his left; and he is consequently obliged to close it when he looks at distant objects. Though not of late years engaged in engraving, he cannot accurately estimate the distance and relative position of near objects. In playing at backgammon, for instance, he frequently takes up a wrong marker. In weak light, the left eye is better than the right. Cases of this kind illustrate some points of function and disease.

of headach and loss of appetite. The effects of the lead are most marked in the white-beds and packing departments. Here, men soon complain of headach, drowsiness, sickness, vomiting, griping, obstinate constipation; and to these succeed colic or inflammation of the bowels, disorders of the urinary organs, and, finally, the most marked of the diseases from lead—palsy. We observed the muscles of the fore-arm more frequently and sooner to suffer than other parts. The eyes are also affected with chronic inflammation, or reduced nervous power. Persons commence the manufacture about the age of twenty; many soon leave, from broken health; those who endure the employ do not remain, on the average, longer than the age of forty-five; and during one-third of these twenty-five years, the men are laid up in bed, or decrepit from colic or palsy. The oldest man known in a large establishment at Hull, we found to have attained the age of fifty-four; but he is now unable to work. It is sixteen years since he entered the employ, and during this period he has been laid up twenty-eight times from serious disease! Each attack has been worse than its predecessor. He has been, on one occasion, nineteen weeks in bed, with scarcely the power of stirring a limb, and was a month without any evacuation from the bowels. This miserable man is now partially paralytic; he has scarcely any motion in either wrist, and his lower extremities are so weakened that he can scarcely trail himself along, even with the aid of a crutch. His haggard countenance and emaciated frame give the appearance of the age of eighty rather than of fifty-four. No person can be a month in the worst department without a serious attack of disease. Drunkards suffer most. One of them was said to have been suddenly seized with violent insanity while packing lead, and to have died soon after. Persons do not work in the lead-manufactory more than five days a week on the average; and as no man could be induced to remain in the destructive departments, there is a regular change of duties. Thus, though none are destroyed, all are exposed in turn to the most baneful process.—What means can be used to improve the state of these wretched operatives? Last year I examined with care the agency of white lead, which was said to have been rendered innocuous by a peculiar process. I regret to add, that I cannot support the statement of the projector. Will any chemical process avail to prevent the poisonous effects of this mineral? Can any substitute be found for its use in our arts and manufactures? For paint, Mr. Parkes, the chemist, recommends carbonate or oxide of zinc, which, if not wholly harmless, is a less noxious substance, and states, that though not quite so white, it keeps its hue longer than the common carbonate of lead. One means, at least, of prevention, is quite practicable—cleanliness. The success of this simple measure, at one manufactory, warrants our belief that more than half the diseases of lead-preparers would be prevented by washing and brushing the hands and skin whenever they leave work, cleaning the mouth, changing the dress, and the regular use of the bath. A linen dress is also recommended as excluding from the skin much of the dust

which would enter through woollen. The rooms in which the processes are carried on ought, of course, to be spacious and well ventilated; and there should always be a strong draught through the furnace. A subsidiary chimney, anterior to the ordinary one, is mentioned by Dr. Christison as particularly efficient in carrying off the exhalations from the rakings. Men should never be allowed to take their meals in the workshops. Fatty aliments are recommended as a preservative from the poison of lead.

Soap-boilers, exposed to exhalations from the oil and alkali, are healthy, and even ruddy. During the plague in London this employment was said to be remarkably exempt. Soap-boilers are generally temperate and live to full age.

Soldiers.—The capacity of the chest in soldiers appears to be considerably greater than that in artisans, and, indeed, in most other classes of society. Nineteen individuals from the 14th Light Dragoons, examined by an apparatus which may be termed a pul-mometer, gave an average of 217 cubic inches of air, which a man could throw out at one full expiration. Nine were officers, and the average of these was 240 cubic inches; four musicians, who used wind instruments, and the average was 220; six privates, 247. A tall young cornet threw out 295; and this is the largest expiration we have known.

Sugar-refiners are exposed to more heat than almost any class of operatives. The temperature in which they work is 70°, 90°, and sometimes 120°; and that of the stoves is 150°, 180°, and often 200°. Germans, bearing the work better than Englishmen, are almost exclusively employed. Though dressed only in flannel shirts and linen trousers, they perspire profusely: on coming out of the stoves, however, they take care to rub the skin dry. A disagreeable acetous exhalation arises during the process, but does not appear to affect health. The steam also is sometimes so great as to prevent the men seeing each other. A barrel of ale placed in the sugar-house allows free potation; much, indeed, is taken—from three to four, or even five quarts each per day; but the men do not appear to suffer from this quantity; and drunkenness is rare. They work from 3 A.M. to 3 P.M.: the labour is great. Sugar-refiners are healthy and remarkably muscular: they never suffer from the complaints commonly termed colds. They are said to be rather frequently affected with hernia, to be subject to rheumatism, and to be worn out, or die consumptive, generally before they reach the age of fifty.—[*Thackra, 2d Edition.*]

REASONING FACULTIES OF ANIMALS.

That animals possess the faculty of reasoning, and are not solely guided by instinct, is the opinion of many British as well as foreign naturalists, and numerous facts corroborative of this doctrine may be found scattered throughout their works;—doubtless a more enlarged acquaintance with, and a stricter attention to, their habits would still farther strengthen and confirm this hypothesis.

The sagacity of the beaver, the cunning of the fox, the polity of the bee, the industry of the ant, &c. &c. are so obvious to the most superficial observer, as to have become proverbial; and amongst the volatile tribes, instances of foresight and reasoning are often displayed, wholly unaccountable on the principle of mere blind instinct. To this purpose, an American naturalist (Dr. Steel) mentions the sagacity of the swallows frequenting the banks of the Saratoga, which often alter the construction of their nests according to circumstances, in order to secure their young from the depredation of their natural enemies; and an instance of equal, if not greater, sagacity in this tribe of volatiles, I myself witnessed in the south of Scotland several years ago. The spring had been uncommonly mild, and the congregation of swallows in the vicinity of the Cheviot was greater than had ever before been observed by the oldest inhabitant of this border district. Numerous flocks of them might be seen constructing their nests underneath the straw-thatched roofs of the barns and farm-steads on the Kale and the Beaumont. The ancient straggling mansion of Thirlstane seemed in particular to be one of their favourite resorts; the walls were thickly studded with their nests, and two were even attached to the upper corners of one of the bed-room windows. An unusual commotion amongst this feathered community on morning attracted the notice of the family while seated at breakfast, and led to the discovery, that the two nests within reach of the house-maid's broom had been swept away.

Throughout the early part of the day the birds congregated in great numbers on a dilapidated shed in the rear of the house, and by their incessant chattering and agitation seemed to be engaged in deep consultation. Towards noon, however, the noisy conclave broke up, when the bereaved pairs immediately recommenced their labours at an angle of the roof farthest from the insecure site they had before chosen. The necessity for despatch was doubtless urgent, as the breeding season seemed at hand; and in this emergency they were not left unaided by their companions, since six, sometimes eight, were seen flying backwards and forwards, and poising themselves on the edge of the overhanging roof, loaded with materials, while as many as could find room assisted in the building operations.

Without entering on the disputed point, whether the lower order of animals, even admitting them to be endowed with a certain portion of reason, are, or are not, capable of transmitting their individual acquisitions to the species, it seems at least sufficiently evident in the above instance, that the swallows not only communicated a knowledge of their wants and feelings to each other, but profited by the united experience and assistance of their kind.

But, however this may be, I have widely deviated from my purpose, which was merely to recount what appeared to me a striking instance of reasoning in the common sparrow.

The day of the opening of London Bridge was a day of jubilee to the flocks of those little familiars in the outskirts of the motro-

polis, owing to the almost total desertion of the streets and squares by people of every rank and degree who had hurried to witness that splendid spectacle.

A few of them from an adjoining garden, that usually pick up in haste and on the wing the crumbs that I am in the daily habit of throwing to them from the breakfast-table, emboldened by the absence of all bustle, alighted fearlessly on the pavement, and soon devoured their allowance, except a hard crust about the size of a walnut, which resisted their united efforts to reduce it to fragments.

As I stood watching their proceedings, they one by one flew off, with the exception of a single bird, which continued its efforts for some time longer. After a while, however, even its patience failed, and it hopped to the edge of the curb-stone, apparently about to take flight after its companions, when suddenly, as if actuated by some new idea, it returned, took up the *hard-harted* crust in its bill, and flying towards the kennel immersed it in a little puddel of stagnant water. Thus softened, the sagacious little creature brought it back to the pavement, and readily succeeded in picking it to pieces.

A. C. HALL.

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PHRENOLOGY.

Every new novel has a trumpeter of its merits amongst the corps editorial;—and every pamphlet, polemical or political, is ushered into public notice by the glad acclaim of the dogmatists or partisans, repectively, whose views it more especially favours. But, works which do not appeal to the sordid interests, or to the passions and prejudices of the world, however learned in disquisition, philosophical in argument, and mild and suasive in morals, are often doomed to be coldly received, long treated with indifference, if not entirely overlooked, and for a season forgotten. The higher the aim of their authors, the more determinate, often, is the dogged opposition made to their writings and teachings. Quacks, conjurers and knaves of all degrees meet with ready credence, and are often eagerly sought after. They promise present gain and freedom from present ills, no matter at what future cost and hazard.—But the philosopher, who, looking to remote and grand results, shall infringe ever so little on present even though they be vicious enjoyments—vicious because opposed to health and serenity of mind, is scoffed at, and ridiculed as an enthusiast, a mere man of theory and a fosterer of melancholy. Where shall we find a stron-

ger contrast, and at the same time a better illustration of our argument, than in the diffusion of the novels of Sir Walter Scott, and the comparative neglect of the labours, by teaching and writing, of the works of Gall and Spurzheim. The first have been circulated through the whole civilized world, and read and praised to satiety;—and what was the aim of their author? Reputation and still more money.—And what their effects? To tickle the fancy, excite undue deference to aristocratic privileges, and misplaced enthusiasm for aristocratic lawlessness and rapine,—to the oversight of the milder virtues and domestic duties. They served at best to amuse—their morality is of a doubtful character. The doctrines of Phrenology, on the other hand, coldly received and long treated with ridicule, were any thing but a passport to the present fame or emoluments of their first authors and yet zealous promulgators. Their effects would be a reform of the prevailing system of education, an improvement of the whole human race—by pointing out and enforcing those physical and organic laws, an observance of which is necessary to the full development of the bodily powers, and a complete and regular and happy display, in suitable series and alternation, of the faculties of the mind. Phrenology is connected with and constitutes a basis for establishing firmly correct systems of education, morality and jurisprudence, conformably with charity and religion. These objects were too great and momentous to be suddenly appreciated in their full proportion and importance by the crowd:—they were on this account much neglected, and even decried by men who thought they could in this way excuse themselves for the prejudices of ignorance and the apathy of indolence.

Time is at length working out a remedy—mankind has too long suffered by ill digested plans for its guidance and government, not to sometimes turn an ear to the suggestions of wisdom, even though no royal road be offered by which to escape from their grievances. Metaphysicians have mystified their readers and bewildered themselves long enough. It is now admitted pretty generally, that for a man to understand and reason on the processes of thought and the faculties of the mind in general, he must have some knowledge of the organization by and through which the Creator has chosen to perform and reveal them. To treat of vision requires one to be conversant with the structure of the several parts of the eye, and the nature of the agencies by which it is more peculiarly impressed and excited. So it is admitted now—that to discuss the subject of mental phenomena demands a knowledge of the structure of the material instrument of thought, or the brain, and its various depen-

dencies and connexions with other parts of the animal machine.—Physiology ought then of necessity to precede the study of intellectual and ethical philosophy. More particularly is it incumbent on us to become masters of that part of special physiology now designated by the term *phrenology*. This latter treats of structure and of function, of innate propensity and acquired disposition, of motives compounded of innate desire and of after education,—of the struggle between the propension for evil and the sentiment of good—of the means of strengthening the latter, and checking the former, and of turning the intellect in this service to the best account. It shows the harmony between the intentions of Providence, and the laws which govern the animal economy,—and between good health and good morals,—and between all reasonable indulgence and wisdom. It shows wherein the misconduct of the parent becomes the source of infirmity, and of physical and moral obliquity in the child. By clearly displaying the danger, it removes all excuse of ignorance of the means of prevention not less than of removal.

These high and momentous topics have been discussed and illustrated at some length in works to which hitherto the American public have had a very restricted access;—but which are now placed within their reach. Enterprising publishers of Boston, Messrs. Marsh, Capen & Lyon, have issued the works of Dr. Spurzheim on the Physiognomical System, and on Insanity, and on Education—and to be followed by those of Mr. Combe, and of his brother Dr. Combe, of Edinburgh.

Ignorance and Crime.—It appears from a report based on statistical returns made to the French Academy of Sciences, that the ignorant and unlettered in France furnish the greatest number of criminals. In 1830, out of 6,962 accused of various crimes, 4,319 did not know either how to read or write, 1,826 had very limited notions on these points, 688 could read and write, and only 129 had been well instructed in these things. More than three-fifths of the whole number (61 to 62 in 100) did not know either how to read or to write.

From the illiterate alone, that is, those ignorant of the above elements of human knowledge, came the list of parricides.

Education in Europe.—It has been estimated that there are from eight to nine millions of males in France who are destitute of in-

struction—being in the proportion to the whole number as 6 to 10.

The proportion of children going to school to the entire population, is already in some of the departments in France, a fourteenth. But these are favourable examples and far from being the average, which is much lower. In Holland and Austria, the proportion is 11th to 13th—in Prussia 18th—in England 16th—Russia 1 in 954.

Skin and Stomach.—Let these two important organs be attended to in a proper manner, and all the diseases of summer, cholera inclusive, will be avoided. The kind of attention to the skin consists in daily frictions with a coarse towel or flesh brush—the tepid or warm bath twice, or at the least once a week; or, in lieu of this, daily sponging the surface with salt and water with the chill taken off it, and then rubbing with a dry coarse towel. The stomach will have justice done it by an avoidance of all alcoholic drinks; the moderate use of tea and coffee, if such be habitually taken; a due proportion of well boiled vegetables with meat roasted or boiled—and on occasions in sanguine temperament in a feverish habit of body, a moderate share of ripe cooked fruits—to the exclusion however of cherries and plums. In all cases where disease is present in a place, no kind of fruit nor any new or unaccustomed article of diet whatever should be taken *in the evening*.

CHOLERA IN HAVANA.

The following sketch of medical topography of the city of Havana, and of the Cholera, as it prevailed in that city, will prove acceptable to our readers. We derive it from a longer article on the subject published in the *Boston Medical Magazine*. In preceding pages of this number of the Journal, we have introduced the highly interesting notice of the disease in Quebec, by Archdeacon Mountain. To the intemperate it exhibits a warning against continuance in habits, which, wherever the cholera prevailed, so invariably endanger the health and lives of those indulging in them. A husband and wife both drunkards!—Both dead of the disease,—leaving behind them two orphans! Persons dead drunk taken to the hospital as cholera patients, going out when sobered—and soon after on returning to their habits of drunkenness brought in once more, under no false alarm, but actually sick, and that unto death, with cholera! A man coming on board the steam boat singing a drinking song, himself a drunkard,—on the second day a corpse

and thrown overboard!—What sholemn lessons are these, and the like of them are furnished in, alas! large numbers in almost every place in which the cholera has committed its fearful ravages.

In the Havana, it should be noted that, the first victim to the disease was an intemperate man.

On another point the non-contagiousness of cholera, the testimony of the venerable Archdeacon is clear and encouraging when he says—

“The Medical gentlemen who are constantly busy in contact with the patients; the clergy who, to talk with them to any purpose must, in many instances touch them and receive their breath close to their own;—the friends and attendants about them night and day, who relieve them by friction of the hand till they are themselves perspiring with open pores—and others who handle their clothing and bedding before and after death, *remained quite as exempt as any other classes of persons from the disease.*”

We now proceed to give the promised account of the epidemic in Havana.

“Havana is a walled city and is situated on a harbour of the same name, with the sea in full view within a short distance upon the north. The exact population of the city and its suburbs is not known, but is differently estimated from 100,000 to 140,000 souls, the mean of which, 120,000, is undoubtedly not far from the truth. It is thought that the number of inhabitants in the city is about equal to that in the suburbs, and that blacks and whites constitute an equal proportion. The city within the walls is regularly laid out in squares, the streets intersecting each other at right angles. The streets are narrow and filthy. The rain water and waste water from houses, run on the surface, in the middle of the streets, which consequently are always more or less wet. Most of the streets in the suburbs are also narrow, unpaved and exceedingly filthy from the accumulation of waste water, together with animal and vegetable substances undergoing decomposition. Many of the streets are impassable with carriages, the wheels going into the filth and mud from one to two feet. The bank of the ditch which surrounds the city, immediately outside of the wall, is strewn with all manner of nuisances, such as putrid carcasses of fowls and animals, excrements of bipeds and quadrupeds, and decomposing fruits and vegetables. The houses in the suburbs are principally one story high, and have large unglazed windows towards the street.

“The climate is delightful in every respect; the mercury, by Fahrenheit’s thermometer, ranges, while the sun is above the horizon, from 78° to 85°, and while it is below the horizon, from 70° to 77°. The mercury seldom rises above 90°, and as seldom falls below 65°. The writer of this was credibly informed, by a very intelligent valetudinarian, who has resided there some years for the benefit of his health, that the mercury was never known to fall be-

low 58° above zero. The same degree of heat, as indicated by the thermometer, is much less oppressive in Havana than in the United States, in consequence of the refreshing breezes, which almost always prevail in the former place. The perpendicular rise and fall of the tide is from eighteen inches to two feet, consequently, comparatively speaking, there are no flats from the surface of which, mephitic vapors can escape.

"The native inhabitants are very temperate in their habits, as it respects the use of stimulants; their drink consisting, principally, of orangeade, lemonade, and coffee.

"Notwithstanding the salubrity of the climate, the temperance of the inhabitants, and other circumstance favourable to health, except the narrowness and filth of the streets, Cholera prevailed, as a malignant epidemic, from the last of February to the middle of April, at which time, however, it had not entirely disappeared, as ten to fifteen fatal cases were occurring daily. A physician, who was in respectable practice, remarked, that, for several months before the cholera made its appearance, affections of the mucus membrane were uncommonly numerous, especially diarrhœa, coughs, and catarrh. From the middle of February to the middle of March, almost every person complained of having a severe attack of catarrh; for which no obvious reason could be assigned. On the 23d of February, the first case of cholera, that is known to have occurred in Havana, was found at the Punta, (point) which is at the north part of the city, outside of the walls, within one hundred yards of the sea. The subject was a white man, whose habits, being intemperate, were an exception to the general character of the Spaniards. The case terminated fatally, in a few hours after attack. Soldiers were stationed about the house, in which this case occurred, to prevent any person approaching it and contracting the disease. Although a sanitary cordon was thus established, still the disease appeared in different parts of the city and suburbs.

"The writer was not informed of the occurrence of any case after the first, until the 27th, when several cases occurred and terminated fatally. After this, the number of fatal cases increased gradually until the 10th of March, on which day there were 221 burials, of whom 46 were whites, in the three principal cemeteries. Besides these three cemeteries, there were two or three smaller ones. After this time, the disease still continued to increase in malignancy and in number of attacks. On the 22d, the number of burials, in the three cemeteries just referred to, was 555, of whom, 153 were whites. It was judged by physicians, and other persons who had intercourse at the Governor's House, that, on the 22d instant, there were no less than 650 or 700 deaths. At this time the epidemic had attained its maximum of severity, as indicated by the number of daily fatal cases. After the first of April, the number of daily burials began to diminish, and continued to do so until the middle of April, when there were 10 or 15 only per day."

"*Origin of the Disease.* The epidemic could not be traced to any foreign source. The person, first attacked by the disease had

not been out of the city, as the writer was informed, nor had he intercourse with foreigners or with foreign vessels in port."

"The epidemic, as it has already been remarked, commenced in the suburbs, and it was there that it caused the greatest destruction, and particularly in the southwestern part of the suburbs, where many entire families died of the disease. Although the population is about equal within and without the walls, still the number of deaths in the latter place far exceeded that in the former. Whether the greater fatality of the disease in this, than in any other part of Havana, is to be attributed to the uncleanness of the streets, or to some other cause, is beyond our knowledge. There can be no doubt, however, that the filth, from which emanated an almost insufferable fœtor, was a powerful excitant of the disease, and that it co-operated with other causes to occasion the great number of cases in this particular section of the city. Soon after the irruption of the disease, the streets within the walls were made comparatively clean, by setting to work in them an increased number of slaves, which circumstance admonishes us (bearing in mind the difference in ratio of deaths in the two localities) that in order to prevent the prevalence of the epidemic, we should place more confidence in measures for cleaning the city, than in quarantine regulations or sanitary cordons."

"*Class of persons attacked.*—By referring to the number of burials on the 10th and 22d of March, a list of which was obtained from an official source, it will be seen that on the former date, twenty per centum of all the bodies buried were whites, and that on the latter date twenty-seven per centum were whites. From this it appears that about three of every four that died were blacks. Persons attacked, when there had been no obvious exciting cause, were more frequently of infirm health than otherwise, so far as the writer's observation extended. This remark is intended to include all persons, whose general health was in a poor state—which state might be the effect of a chronic disease, imprudent habits, or any other cause."

ALEXANDER'S EXPEDITION UP THE ESSEQUIBO.

From this amusing narrative we extract the following curious items of natural history.—

My purpose was now to proceed up the noble Essequibo river towards the El Dorado of Sir Walter Raleigh, and view the mighty forests of the interior, and the varied and beautiful tribes by which they are inhabited. Our residence on the island of Wakenaam had been truly a tropical one. During the night, the tree-frogs, crickets, razor-grinders, reptiles, and insects of every kind, kept up a continued concert. At sunrise, when the flowers unfolded themselves, the humming-birds, with the metallic lustre glittering on their wings, passed rapidly from blossom to blossom. The bright yellow and black mocking-birds flew from their pendant nests, ac-

accompanied by their neighbours, the wild bees, which construct their earthen hives on the same tree. The continued rains had driven the snakes from their holes, and on the path were seen the bush-master (*conacouchi*) unrivalled for its brilliant colours, and the deadly nature of its poison; and the labari, equally poisonous, which erects its scales in a frightful manner when irritated. The rattlesnake was also to be met with, and harmless tree snakes of many species. Under the river's bank lay enormous caymen or alligators,—one lately killed measured twenty-two feet. Wild deer and the peccari hog were seen in the glades in the centre of the island; and the jaguar and cougar (the American leopard and lion) occasionally swam over from the main land.

We sailed up the Essequibo for a hundred miles in a small schooner of thirty tons, and occasionally took to canoes or coorials to visit the creeks. We then went up a part of the Mazarooni river, and saw also the unexplored Coioony: these three rivers join their waters about one hundred miles from the mouth of the Essequibo. In sailing or paddling up the stream, the breadth is so great, and the wooded islands so numerous, that it appears as if we navigated a large lake. The Dutch in former times had cotton, indigo, and cocoa estates up the Essequibo, beyond their capital Kykoveral, on an island at the forks or junction of the three rivers. Now, beyond the islands at the mouth of the Essequibo there are no estates, and the mighty forest has obliterated all traces of former cultivation. Solitude and silence are on either hand, not a vestige of the dwellings of the Hollanders being to be seen; and only occasionally in struggling through the entangled brushwood one stumbled over a marble tombstone brought from the shores of the Zuyderzee.

At every turn of the river we discovered objects of great interest. The dense and nearly impenetrable forest itself occupied our chief attention; magnificent trees, altogether new to us, were anchored to the ground by bush-rope, convolvuli, and parasitical plants of every variety. The flowers of these cause the woods to appear as if hung with garlands. Pre-eminent above the others was the towering and majestic Mora, its trunk spread out into buttresses; on its top would be seen the king of the vultures expanding his immense wings to dry after the dews of night. The very peculiar and romantic cry of the bell-bird, or campanero, would be heard at intervals; it is white, about the size of a pigeon, with a leathery excrescence on its forehead, and the sound which it produces in the lone woods is like that of a convent-bell tolling.

"A crash of the reeds and brushwood on the river's bank would be followed by a tapir, the western elephant, coming down to drink and to roll himself in the mud; and the manati or river-cow would lift its black head and small piercing eye above the water to graze on the leaves of the corridoré tree. They are shot from a stage fixed in the water, with branches of their favourite food hanging from it; one of twenty-two cwt. was killed not long ago. High up the river, where the alluvium of the estuary is changed for white

sandstone, with occasionally black oxide of manganese, the fish are of delicious flavour; among others, the pacoo, near the Falls or Rapids, which is flat, twenty inches long, and weighs four pounds; it feeds on the seed of the *arum arborescens*, in devouring which the Indians shoot it with their arrows: of similar genus are the cartuback, woboory, and amah.

The most remarkable fish of these rivers are, the *peri* or *omah*, two feet long; its teeth and jaws are so strong, that it cracks the shells of most nuts to feed on their kernels, and is most voracious.

* * Also the genus *silurus*, the young of which swim in a shoal of one hundred and fifty over the head of the mother, who, on the approach of danger, opens her mouth, and thus saves her progeny; with the *loricaria calicthys*, or *assa*, which constructs a nest on the surface of pools from the blades of grass floating about, and in this deposits its spawn, which is hatched by the sun. In the dry season this remarkable fish has been dug out of the ground, for it burrows in the rains owing to the strength and power of the spine; in the gill-fin and body it is covered with strong plates, and far below the surface finds moisture to keep it alive. The *electric eel* is also an inhabitant of these waters, and has sometimes nearly proved fatal to the strongest swimmer. If sent to England in tubs, the wood and iron act as conductors, and keep the fish in a continued state of exhaustion, causing, eventually, death: an earthenware jar is the vessel in which to keep it in health.

DURATION OF CERTAIN TREES.

If we consider the trunk of a tree to be increased by the materials accumulated by fresh crops of buds annually produced upon its surface, then it bears a strong analogy to a coral reef, the animals of which possess an individual existence, and are separately employed in increasing the aggregate mass of their habitations.—Strictly speaking, then, the death of a tree can never result from any effects of old age at all similar to those which necessarily destroy life in the animal kingdom, where we find a very limited period of existence assigned to each individual, in consequence of the obstruction of those organs which are destined to perform the function of nutrition, which may be carried on during the old age of the tree as vigorously as it was performed by the young plant.—Those causes, then, which ultimately destroy life in plants must be classed as accidents, or as proceeding from various diseases, induced by the influence of external agency; large limbs are broken off by their own weight, and thus rottenness is introduced into the heart of the trunk, which gradually becomes too feeble to support the foliage, and is blown down. But wherever these and similar accidents have been prevented, trees have attained to a vast antiquity, and there are very plausible reasons for believing that there are at this time in existence many which have endured far beyond the records of history, and must have been standing shortly after the last general catastrophe to which this earth has been subjected.

That the life of very many plants is necessarily very short, as in the case of annuals, biennials, and others, seems to arise from the complete exhaustion which they suffer during the maturation of their seed, all the nutriment prepared in their stems being wholly abstracted by this effort.

In order, however, to give some weight to these conjectures respecting the possible duration of certain trees, it is necessary that we should point out the method by which we are enabled to approximate to the age of very old trees, with some tolerable degree of certainty. In many exogenous trees, which is the character of all the timber of temperate climates, the number of concentric zones observable in a transverse section of their stems, affords an exact measure of their duration, provided the section be made near the root. By placing a strip of paper upon the surface of such a section, and extending it from the centre to the bark, the distances between the several zones can be marked upon it, and thus a register may be formed both of their number and of the relative growth of different years. On account, however, of the frequent inequalities in different parts of the same zone, it is better to take the girth of the tree, and obtain the mean rate of increase, by dividing the mean diameter by the number of zones. No good result can be obtained from any observations of this kind upon trees that are much below a hundred years, as their rate of growth is too unsteady, and varies too much in different individuals prior, to this period; but very useful averages may be obtained from old trees. because, after a certain age, they obtain a more settled rate of increase. The averages which are thus obtained, will serve us for approximating to the age of others. They may also serve as a test for calculating the relative worth of timber of the same kind, as a building material: since the preserving quality in wood depends upon its compactness, and this again upon the slowness of its growth, it may be seen, by simply inspecting the layers of any particular specimen, whether its age is above or below the general average of trees of the same bulk, and consequently whether the compactness of the timber is greater or less than usual. There are various methods of obtaining a scale, which may serve for approximating to the ages of trees, besides the one just mentioned. Their rates of increase may be obtained by measuring their trunks at successive intervals of time; or a lateral incision may be made, and the number of layers counted to a certain depth. In all these expedients, however, the observer must be careful to make great allowance for the fact that trees increase more rapidly in the early stages of their growth than afterwards. The dimensions of several very large trees have been recorded both by ancient and modern observers, and various conjectures have been offered respecting their probable ages. Some of these trees, indeed, like the celebrated chesnut of Mount *Ætna*, appear to have resulted from the union of several trunks which had grown near together. There are others, however, as the oaks, and more especially the yews, recorded by Evelyn, which are single trees of vast antiquity. De Candolle, by computing the results

of several observations, has ascertained the average increase of the yew to be about one line, or the twelfth of an inch, in diameter, yearly. Applying this rate for calculating the ages of the four most celebrated yew-trees in Great Britain, whose dimensions are on record, he finds them respectively to have lived 1214, 1287, 2558, and 2880 years. In the first of these examples, we have the testimony of history for knowing that this tree was in existence, and must have been of considerable size, in the year 1133, it being recorded that the monks took shelter under it whilst they were rebuilding Fountain's Abbey. These and other facts respecting the probable duration of some of the largest European trees, throw considerable plausibility on the views of Adanson, who, nearly a century ago, had constructed a table, from a regular geometrical formula, for calculating the probable ages of the enormous Baobabs of Senegal. The extended duration of these trees is favoured by the circumstances of their not attaining to any great height, and by their growing in a country where they are never exposed to the effects of frost; there are several examples of their trunks attaining to the enormous dimensions of sixty, and even ninety feet in circumference. Adanson mentions the data upon which he proceeded in constructing his table, and there is no apparent reason for our supposing that his conclusions do not lie within the truth. For example, his table ascribes the age of 210 years to a trunk six feet in diameter: but he had found some trees of this size in a small island off Cape Verd, upon which he noticed the traces of inscriptions, some of which were dated from the fourteenth, and others from the fifteenth century.

Now we can hardly suppose their diameters to have been less than four feet at the time when the inscriptions were first carved upon them: a supposition which allows an increase of only two feet in 300 years, and which would consequently make them 800 instead of 210 years old, as shown by the table. What, then, must be the age of a similar tree of thirty feet in diameter? The table itself ascribes to it a life of 5150 years! But this subject has hitherto engaged so little of the attention of observers, that we want additional testimony before we can be expected to place much confidence in speculations which, it must be confessed, are, at first sight, very startling. De Candolle, indeed, seems to consider the question in some measure settled, and sums up his account with the following remarks:

"I think that I have given a detailed proof in this section of the existence, past or present, on the earth, of some very old trees, viz.—of an elm of 335 years; cypress about 350 years; Cheirolemon about 400 years; ivy 450 years; larch 576 years; orange 630 years; Olive 700 years; Oriental plane 720 years and upwards; cedar of Lebanon about 800 years; oak 810, 1080, 1500 years; lime 1076, 1147 years; yew 1214, 1458, 2588, 2880 years; Taxodium about from 4000 to 6000 years; Raobab 5150 (in the year 1757.)"

HIGH LIVING AND MEAN THINKING.

How much nicer people are in their persons than in their minds. How anxious are they to wear the appearance of wealth and taste in the things of outward show, while their intellects are all poverty and meanness. See one of the apes of fashion with his coxcombs and ostentations of luxury. His clothes must be made by the best tailor, his horses must be of the best blood, his wines of the finest flavor, his cookery of the highest, but his reading is of the poorest frivolities, or of the lowest and most despicable vulgarity. In the enjoyment of the animal senses, he is an epicure; but a pig is a clean feeder compared with his mind; and a pig would eat good and bad, sweet and foul alike, but his mind has no taste except for the most worthless garbage. The pig has no discrimination and a great appetite; the mind which we describe has not the apology of voracity; it is satisfied with little, but the little must be of the worst sort, and every thing of a better quality is rejected by it with disgust. If we could see men's minds as we see their bodies, what a spectacle of nakedness, destitution, deformity, and disease it would be! What hideous dwarfs and cripples! What dirt, and what revolting cravings! and all these in connection with the most exquisite care and pampering of the body. If many a conceited coxcomb could see his own mind, he would see a thing, the like of which is not to be found in the meanest object the world can present. It is not with beggary, in the most degraded state, that it is to be compared, for the beggar has wants, is dissatisfied with his state, has wishes for enjoyments above his lot, but the pauper of intellect is content with his poverty; it is his choice to feed on carrion, he can relish nothing else, he has no desire beyond the filthy fare. Yet he piques himself that he is a superior being; he takes to himself the merit of his tailor, his coach-maker, his upholster, his wine-merchant, his cook; but if the thing were turned inside out, if that concealed nasty corner, his mind, were exposed to view, how degrading would be the exhibition.

Might it not be reasonably expected that people should take as much pride in the nicety of their minds as in that of their persons? The purity of the mind, the careful preservation of it from the defilement of loose or grovelling thoughts, is surely as much a matter of necessary decency as the cleanliness of the body. The coarse-clothing of the person is a badge of poverty; what then should be thought of the coarse entertainment of the imagination? what destitution does it argue? and when it is seen with all the luxuries of abundant wealth, how odious is the contrast between the superfluities of fortune and the pitiable penury of the understanding! The mansion is spacious and elegantly furnished, but the soul of the occupier is only comparable to its dust-hole, a dark dirty receptacle for the vilest trash and rubbish. You see an affluent family in London; you see girls for whose education no cost has been spared, who have been guarded with the most jealous care against vulgar associations, who are to be refined if they are to be nothing else; and you see on their table a Sunday newspaper, the staples of which

are obscenity and scurrility, put forth in style probably much below the loosest conversation of the footman in the hall. How would parents shudder at the thought of their daughters listening to a familiar conversation of the coarsest turn carried on by their lacqueys, and what matters it in effect whether the debauchery is taken in at the eye or the ear? These things deserve to be thought of in another manner. The care of the mind has yet to have a commencement. Its servants and its food have hitherto been of the lowest sort; but on both the character of ministration and nutriment, the purity and soundness of the intellect must greatly depend. A good sign it would be when some of the pride in the ostentation of gold is transferred to the show of the riches of the mind, and when the appearances of poverty of the intellect are shunned as those now are of the poverty of the purse.—*English Magazine.*

ENGLISH SOCIETY DINNERS.

May 6. This is the season for public societies to hold their meetings. It would be next to impossible to ascertain the number, charitable, religious, literary, dramatic, philanthropic, and of all descriptions. I made some attempts, but ceased from their hopelessness. A public spirited individual, who is also a member of parliament, handed me a printed list containing the day and place of meeting of between fifty and sixty of those only with which he was connected. The Egyptian hall, city of London tavern, Crown and Anchor, or some other large building is chosen, and a round of dinners begins; this being most commonly the form of celebration. Persons who were together at the principal schools, as Eton and Harrow, and fellow graduates of the different colleges in the universities, have also their annual dinners, to keep alive early friendships. Many of the associates come up to town from their homes at a distance in the country, on purpose to attend them.

The English are very remarkable for giving dinners. I do not allude to the kind last named, or those in private life; but to their habit of giving them in connexion with objects exclusively public. These, charitable ones among them, they constantly advance in this manner.

“The veins unfilled, our blood is cold, and then
We pout upon the morning, are unapt
To give or to forgive; but when we have stuffed
These pipes and these conveyances of our blood
With wine and feeding, we have suppler souls
Than in our priest-like fasts.”

If the English meant to go by this doctrine of their great bard, they have done well, for their charities are stupendous. A newspaper can hardly be opened that does not hold up a long list of subscriptions amounting to sums that are sometimes enormous. I have now particular reference to some for building churches and esta-

blishing schools, that within a few days have met my eye. So, in various parts of London, hospitals and other asylums for the distressed, arrest attention bearing the inscription "FOUNDED BY VOLUNTARY CONTRIBUTION," which would be little remarkable, perhaps, were they not beheld in connexion with poor taxes to an amount such as no nation ever before paid. The buildings devoted to these charitable purposes, are often more spacious than the royal palaces, and show an exterior more imposing.

An annual dinner seems an indispensable adjunct to an English charity. Here is a "*Sumaritan society*;" or an "*Infirmiry for diseases of the eye*;" a society for the "*Relief of decayed Artists*;" another for relieving "*poor authors*;" a fifth for the "*indigent blind*;" a sixth for "*foreigners in distress*;" a seventh for the "*deaf and dumb*;" a society for "*promoting Christian knowledge*;" a "*medical benevolent society*," and I know not how many more, for I merely take examples, all of which have their anniversary dinners. Whatever the demands upon the charitable fund, there seems always enough for a dinner fund too. Eating and drinking are not the sole objects of this festivity. Business is transacted, reports on the state of the charity made, and speeches delivered, in the course of which the pocket is appealed to. Feeling rises as the inspiring glass goes round, and the evening generally closes with an increase of the treasurer's store. Noblemen, including royal dukes, take part on these occasions, often presiding at the dinners, and otherwise giving their personal instrumentality, and freely their purses, towards the objects of the societies. In France, before the revolution, the noble families were computed at thirty thousand. In England, they may perhaps be computed at six or eight hundred; yet this handful does more of the every day business of the country, than the thirty thousand ever did in France. In France they did the work of chivalry; they fought bravely in the army and navy. England besides this, you trace them in road companies, canal companies, benevolent and public institutions of all kinds, to say nothing of their active patronage of the arts, and their share in politics; in the latter, not simply as cabinet ministers, but speakers, committee-men, and hard-workers in all ways.—*Rush's Memoranda of a residence at the Court of London.*

Doughty's Cabinet of Natural History of American Rural Sports.—We have received the eleventh number of the 2d vol. of this work, which preserves its instructive and amusing character; and exhibits as ornaments two finely coloured lithographic drawings—the first of the *Grey Squirrel*, the second of the *Pine Finch* and the *Purple Finch*. We hope and trust that the meritorious efforts of Mr. Doughty, will continue to meet with encouragement and support from all classes of readers, to whose taste it ministers, and within the compass of whose pecuniary means it easily comes.

NOTICE.—The subscribers to the *Journal of Health and Recreation* are requested to pay up their arrears, and to give suitable notice of their intentions for the next year, so that a judgment may be formed of the expediency of continuing the work. Those who have not been heretofore subscribers, and who desire its continuance, will also be good enough to send on in due season, their names to the publisher.

THE
JOURNAL OF HEALTH,
AND
RECREATION.

Health—the poor man's riches, the rich man's bliss

"As much as in thee lies, live at heart's ease."

VOL. IV.]

PHILADELPHIA, AUGUST, 1833.

[No. 12.]

Independently of the information of a direct positive kind, conveyed in the following remarks on the *Influence of Epidemics*, our readers throughout the United States will find a source of consolation, in well founded hopes of increased healthiness following the ravages caused by the devastating cholera. In this city, (Philadelphia), the fact has been of general observation and notoriety. Rarely have the gentlemen of the medical faculty been witnesses to a period of such comparative exemption from disease as since the subsidence of the cholera in 1832. Another fact equally worthy of note, as the best refutation of the accusation brought by satirists against the profession,—the members of it are in good spirits and live in harmony with one another. Repose is to them not idleness, nor does it engender the evils of idleness, viz: mopingness and querulousness.

"Since the frightful epidemic of northern Europe, and particularly of Dantzic, in the years 1709 and 1710, chiefly attributable to scarcity and famine, happily nothing of the kind has been experienced in modern times. Agriculture, it is well known, has since been more successfully cultivated—its principles are better understood, and especially the mode of managing the crops so that they may succeed each other in rich variety; the communication between distant parts has been rendered more easy; people lodge better, live better, and are better clad than at former periods; and by means of improved manufactures and the multiplied resources of industry, together with better modes of government, the population in all European countries has been greatly benefitted—comfort is

more widely diffused, and the occurrence of starvation and its consequences have become every where less to be apprehended.

“Take Viareggio as an example. The inhabitants of this once miserable town in the principality of Lucca, were few in number, and sunk in a deplorable state of misery and barbarism—year after year, from time immemorial, they were regularly attacked with intermittents. In the year 1741, however, sluices were constructed, by which the marshes in their neighbourhood were drained, and at the same time the overflowing of the land from the tides and tempests prevented. By this simple contrivance their constant epidemic was banished, and Viareggio soon became what it is at this day—one of the most healthy, most industrious, and affluent sea-port towns on the coast of Tuscany; and families in it, whose immediate ancestors used to be cut off prematurely and miserably by the *aria cattiva*, now exhibit a degree of health, vigour, longevity, and moral character, such as was never known in that part of the world before.

“Dr. Thomas Short, who wrote his ‘Observations’ about the middle of the last century, makes a remark strongly attesting the power of civilization—namely, that epidemics in the country parts are both more frequent and more destructive than they are in towns. In London, and the other principal cities of the kingdom, according to this author, the epidemics which occurred in the early part of the last century generally carried off no more than a third, a fourth, or even a fifth part, in addition to the usual mortality of common years; whilst, in the country, an epidemic year sometimes numbered with the dead ten, fifteen, eighteen, or twenty times as many as died during a healthy year. M. Villermé has made the same observation with reference to the mortality in France.

“Now with regard to the comparative frequency of epidemics at different periods during the last and present centuries, we may avail ourselves of the same authority for information. Dr. Short calculates, that, previous to 1750, they recurred every four, or from that to eight years, in the country parishes of England; a fact which he gathered from the parish registers: and the conclusion at which he arrives is, that the years decidedly epidemic, as compared to other years, were in the ratio of two to eleven; and that of forty-four consecutive years, from twenty-three to twenty-four counted a small number of deaths, eight were very destructive, and the remaining twelve or thirteen could neither be called salubrious or otherwise. We have no exact returns of the same description for London or the provincial towns, but we may form a pretty adequate notion of at least the decline in the frequency of epidemics visiting them, from M. Villermé’s table for Paris. In drawing up the following tabular form, which is here slightly abridged, the author reckoned as epidemic years those in which there was an increase of deaths amounting to more than one-tenth above those immediately before or after. He found that there were

6 epidemic years out of 13, in the 17th century.

5 " " from 1709 to 1720 inclusive.

5 " " 1731 to 1740 "

4 " " 1741 to 1750 "

4 " " 1761 to 1770 "

4 " " 1781 to 1790 "

3 " " 1801 to 1810 "

2 " " 1821 to 1830 "

"A similar return shews that a change equally prosperous has occurred throughout the whole of France, and M. Villermé justly assumes that we cannot have a stronger proof of the happy influence of advancing civilization.

"There are some facts connected with the decline of epidemics in Paris, which are too curious to be omitted here. Formerly, the end of summer, especially when that season had been unusually warm, was the time for epidemic maladies. Thus the months of August and September (the latter particularly), were, during the latter part of the 17th, and beginning of the 18th century, notoriously fatal. But this appears to be quite changed at present. By a comprehensive table, founded on two millions of deaths, and extending from the end of the 17th century to our own times, M. Villermé shews that the periods of the *maximum* and *minimum* mortality are altogether displaced. Disposing the twelve months in the order of their respective mortality, September, which stood first at the early period referred to, has gradually sunk to the place which it now occupies, the seventh or eighth in the series; while April, which in former times seems to have been comparatively salubrious, has long been raised to the head of the list. The alteration is clearly owing to the decline of epidemics, both in frequency and intensity: when they used to rage, as in the 17th century, the maximum mortality fell in the autumn, while now, under the influence of ordinary circumstances, it occurs in the spring.

"The effect of epidemics on the other diseases does not escape the notice of M. Villermé. What he says on this subject we shall lay before the reader:—"It is the nature of epidemic maladies to render other complaints more rare. This has been observed often enough by physicians; they are familiar with the fact, that while an epidemic reigns, other maladies diminish in frequency, or exhibit more or less of the symptoms of the prevailing disease. In the month of April last, when the cholera prevailed here, we had a good example of this.* But the practical consequence to be derived from the circumstance is, that when an epidemic is not particularly destructive, the usual number of deaths is not much, or scarcely at all, augmented. One might imagine that those persons who at ordinary periods would die of various deaths, now die of the prevailing one, as if the special causes of the latter, its very existence, or the circumstances which attend it, were so many preventives of

* A similar remark will apply to the cholera in Philadelphia and other cities in the United States.

the ordinary mortal diseases. Thus in the 47 communes of the department of the Oise, which reckoned, in 1821, 116 deaths from the *miliary-sweat*, the total mortality did not exceed what it reasonably ought to be, taking into consideration the rate of increase in population, and supposing that no extraordinary cause of mortality existed during that year. For example, in the said communes,

In 1816 there were 709 deaths.				In 1819 there were 787 deaths.			
1817	"	"	735	"	1820	"	813
1818	"	"	718	"	1821 (Epid.)	"	838

The result to be deduced from this and similar facts is, that epidemics, generally speaking, do not warrant the alarm which their appearance ordinarily excites. It is, however, unquestionable that they always increase the number of the sick, as well as that they have often depopulated whole countries."

To an inexperienced observer it would seem almost idle and ridiculous to inquire whether epidemics affect the population of a country, and paradoxical to assert, that even those which are considerably destructive do not. Yet such is the case which correct statistics would seem to make out; and it is accounted for on no very abstruse principle. It is simply because epidemics, for the most part, partake the character described in the preceding passage by M. Villermé, namely, that of swallowing up the mortality of ordinary diseases; and partly, if not principally, because mortality has a powerful influence upon reproduction. An epidemic may be compared to a battle in its effects; yet a battle—nay, a war of ten, fifteen, or twenty years' standing—may not diminish the population of the states which carry it on. That it may not, seems to be put beyond a question by the sanguinary war which raged in Europe from 1791 till 1815; during all that time the number of inhabitants in France, England, Germany, and Italy, suffered no decrease, and that in spite of constant battles, in which too the mortality fell upon men in the full strength and vigor of their age.

But when we say that there was no decrease, we ought to qualify the expression: any decrease which occurred was not permanent: the movement of the population, after suffering a slight shock, went forward again with a renewed impulse; and so it is with epidemics.

When a destructive calamity of either kind carries off a large proportion of the inhabitants of a country, a void in the population is the immediate effect; but invariably this is followed by an extraordinary proportion of marriages and births. Numbers of persons of a marriageable age, having most probably now become possessed of the means by inheritance, hesitate no longer to form matrimonial connexions. Marriages even which were barren hitherto, are now observed to become fruitful. And finally, the returns shew that not only is the annual amount of deaths diminished, but its proportion also,—as if men had really become more vivacious, or less subject to die.

Owing undoubtedly to the occurrence of such circumstances,

it has become a common observation, that great epidemics are followed by periods of great salubrity. But the fact ought not to be overlooked, that on such occasions it is the ill-conditioned, sickly people, that for the most part are cut off—people wasted by suffering, and reduced by privations; while the survivors have more room, more food, and ampler means of subsistence.

The statistics of the Low Countries (Belgium and Holland united) confirm most fully the preceding statements. In the year 1815 there was, of course, a considerable increase in the number of deaths, but the increase in the number of marriages during the same year (chiefly contracted by military men, who, on the return of peace, wished to secure themselves from the chance of being again called out,) was enormously large. Then followed a great increase of births in the next year. In 1817 there was a severe scarcity of provisions; the deaths were greatly augmented again; but when once order was restored, both marriages and births went on increasing prodigiously.

In extreme cases, however, we must allow that the consequences will be very different. It is the opinion of some writers that, in the course of eight or ten years, there are no longer any traces of ruin remaining in a country which has been devastated by the plague. This is a mere opinion, and must be altogether gratuitous, as it leaves out of sight the degree of intensity of the disorder, and the extent of country ravaged by it,—both which considerations are necessary to enable us to determine how long it will be before the population shall attain its natural level. It is more than probable, that there were abundant traces of devastation discernible ten years after the epidemic of 1709 and 1710, and still more so after the black plague of the 14th century. There must at least have been an over-proportion of young children compared with the other ages; just as, after a long and sanguinary war, the women, and, of the male sex, those who are not of an age to take a part in military service, are by far the most numerous.

Such are a few of the more striking topics treated of in this able paper; and seldom have topics so apparently unpromising been discussed in so satisfactory a manner. The author is clearly one of those rare investigators who see the better side of things, and take more delight in it than in the gloomy. The temper and tendency of his essay is encouraging, and practically useful. It shews in the strongest light the salutary consequences resulting to the physical condition of man, from the spread of civilization. This is a fact which good governments might easily improve, and one which ought ever to be kept in view by all whose duty it is to labour for the benefit of mankind.

OLD AGE.

Old age, though the natural consequence of living, and the commencement of death, can itself, on the other hand, be a means for prolonging existence. It does not, however, increase the power to

live, but it renders the exhaustion of life more slow. It may even be affirmed, that a man in the last period of life, at the time when his powers are lessened, would, were he not old, finish his career much sooner. This position, which appears paradoxical, is confirmed by the following explanation:—Man, during the period of old age, has a much smaller provision of the vital power, and a much less capacity for restoration. If he were now to live with the same activity and vigour as in earlier life, this provision would be much sooner exhausted, and death would soon be the consequence. Now by the change in the system which takes place in old age, the natural irritability and sensibility of the body are lessened, as well as the effects of internal and external stimulants, consequently with the corresponding decrease in the actions of the various organs, the wasting powers of life are greatly diminished. On this account as consumption and expenditure are less, he can with his diminished powers hold out much longer. The decreases, therefore, of the intensity of the vital phenomena, as age increases, prolongs vital duration. But all this will in a great measure be true only when old age is properly managed—to attempt the continuance of the same regimen as was practised in the earlier periods of life would rather accelerate than retard death.

As the natural heat of the body decreases in old age, its capability to endure even slight degrees of cold is reduced, hence the warmth of the body should be maintained carefully by warm clothing, apartments and beds, as well as by appropriate exercise and sufficient nourishment. When it can be conveniently done, removal to a warmer climate will tend much to increase the comfortable feelings and prolong the duration of life.

The food of old people should be such as is of easy digestion, rather fluid than solid and abundant in concentrated nourishment. It should be taken in moderate quantities as overloading the stomach is even more dangerous in old age than in youth.

The tepid or warm bath, frequently repeated is exceedingly well calculated to maintain an equable degree of heat in the surface and extremities, to promote all the excretions, to soften the skin and diminish the stiffness of the whole frame.

Exercise in the open air, is important to the preservation of health and the prolongation of life at this period of existence. It should be gentle and never carried to the extent of producing fatigue—walking and riding are best species of exercise for the old.

The mind should be preserved in a state of calm serenity and contentment, are the primary objects of an old person's consideration; and all who surround them ought to exert their utmost to promote it; this is best effected by an intercourse with children and young people of amiable dispositions and pleasing manners. All sudden changes and violent evacuation either by bleeding, purging or perspiration should be carefully guarded against. Some mechanical order at this period of life, has a tendency greatly to prolong a comfortable existence. Eating, drinking, motion, rest, evacuations, employments, ought all, in old age, to have their regular periods and succession.

STATISTICS OF SUICIDE IN FRANCE.

M. GUERRY, the advocate, has presented a report on this subject to the *Academie des Sciences*, from which it appears, that, of the whole number of suicides committed in France, the department of the Seine supplies a sixth part, and that the proportion increases the nearer to Paris and the other large towns. Of 1000 suicides committed in the capital, 505 have been by persons belonging to the departments of the north, 210 of the east, 168 the south, 65 west, and 52 have been by persons from the central departments. The northern departments produce one suicide out of 9,853 inhabitants; the eastern, one out of 21,731; the central, one out of 27,393; the western, one out of 30,499; and the southern, one out of 30,876. Finally, of 100 suicides committed annually, 51 are by people in the north, 11 by those in the south, 16 in the east, 13 in the west, and 9 by the people in the central parts.—*Gazette des Hopitaux*.

THE ANODYNE METALLIC OR GALVANIC BRUSH.

(*Scopula Anodyna Metallica. Annales Scholæ Clinicæ Medicæ.*—Auctore FRANCISCO NOB. AB. HILDENBRAND, M. D. Papiæ, 1830.)

Under this name, Francis Ernest Von Hildenbrand, Professor of Pathology and Practice of Physic at Pavia, describes a remedy rather singular, for the cure of various neuralgic affections. It consists simply of a bundle of metallic wires (*fascis e filis metallicis confectum*), not thicker than common knitting wires, firmly tied together by wire of the same material, so as to form a cylinder about four or five inches long, and one inch or three-fourths of an inch in diameter. This is applied to the pained part, previously moistened with sea-salt, when it produces relief so instantaneous, it is said, that it appears to the patients like the effect of a charm. Occasionally the pain is immediately entirely extinguished, with the accompanying effect of a peculiar sense of emanation from the spot to which the brush is applied, causing the patients to believe that the pain is truly extracted by this method. On withdrawing the brush, the uneasiness occasionally returns, but in a more endurable form. The longer the application is continued, the more decided is the effect obtained; and phenomena so singular have resulted from its application, as even to astonish intelligent persons quite on their guard against any magical illusion.

In illustration of the remedial effects of this agent, Hildenbrand mentions the following case, which he designates as altogether singular and wonderful. A man of 30, a porter by occupation, afflicted with violent periodical tic douloureux of the face (*metopodynia*), was admitted into the clinical wards of Pavia. On applying the metallic brush over the left frontal nerve, the pain immediately disappeared from that one, but fixed on the corresponding nerve of the right side, which had been previously free from pain. The

very moment at which the brush was removed from the left frontal nerve, the pain returned to its original seat, and there remained, though already remarkably abated in intensity. By applying a metallic brush to each supra-orbital nerve simultaneously, the Professor banished the original nerve-ache of the left side, and at the same time prevented it from appearing in the opposite one. The same moment, however, a humming noise arose in each ear, and and this also immediately ceased on the brushes being removed, when the nerve-ache returned immediately, though in a very mitigated form.

In order to obtain the desired effect from the use of the anodyne brushes, Professor Von Hildenbrand impresses the necessity of determining, as accurately as possible, the nature of the *neuralgia*, or the pathological state of the affected nerve. If the pain is merely *nervous*, that is, proceeding from subversion of the equilibrium between the *dynamic factors of the sensitive life*, as the Professor, in imitation of his father, expresses it, without material changes having taken place in the affected part—in which case it attacks periodically; like an intermittent disease, and leaves intermissions entirely void of pain,—then the efficacy of the metallic brush may be pronounced to be almost infallible. But if, from the pain being uninterrupted, or at least void of perfect intermissions—from its aggravation under pressure of the part, from the conjunction of redness, heat or swelling—there is reason to believe that the proximate cause of any case of facial neuralgia or hemicrania, consists in a state of active congestion, or sub-inflammatory irritation, then the metallic brush affords no benefit, nay, sometimes may augment the intensity of the pain. By these means Professor Hildenbrand thinks that the metallic brush, while it maintains at least a palliative therapeutic property in neuralgia of spasmodic character, may, in doubtful cases, furnish an auxiliary diagnostic sign, by the aid of which sub-inflammatory congestion may be distinguished from simple nervous erethism.

In the first experiments performed by Professor Hildenbrand, he employed brushes which were intentionally constructed of two kinds of metal, for instance, silver and copper wire, copper wire and zinc wire, or zinc wire and brass wire, the individual wires being mutually mingled and blended, on the supposition that electricity or galvanism, evolved by the contact of heterogeneous metals, might be the beneficial and sanative agent. He afterwards ascertained, however, that bundles of wires of one and the same metal produced an effect scarcely less speedy, but lost their anodyne influence as soon as they were covered by rust or verdigris. He further ascertained, that solid metallic bodies produce analogous effects, but in a much feebler degree than the numerous acuminate points of the bundle consisting of metallic wires. The nature of the metal, he adds, seems to cause no difference; for brushes of iron wire produce the anticipated alleviation in as great a degree as those of copper wire. If he could trust his observations, how-

ever, he thinks that he perceived a greater degree of anodyne virtue in copper, iron, and gold, than in other metals.

Admitting that the effect is constant, to explain the theory of its production, Professor Hildenbrand does not hesitate to deduce it from the laws of electricity. The original nature of metallic bodies, which are remarkably good conductors of electricity; the rapid action of the brush, if the aching spot has been previously moistened by the saline solution; the remarkable tendency of pointed bodies in attracting electricity; and the sense of an emanation, and an agreeable coolness, combined with manifest alleviation of pain admitted by the patients, he regards as no trifling arguments to infer, in the disordered and aching nerves, a certain degree of *electric plethora*, or accumulation of animal electricity, which may be discharged by the application of a suitable conductor. This hypothesis, he lastly remarks, would accurately correspond with the notions delivered in his elements on the accumulation of the imponderable Biotic principle in various parts of the nervous system, as the proximate cause of nervous disorders which attack in paroxysms, and are dissipated by what he denominates autocratic explosions.

BODY AND MIND.

A stroke of personal satire, remarks a modern writer, was evidently levelled at Dryden when Bayes in the *Rehearsal* informs us of his preparation for a course of study by a course of medicine.—Such was really the practice of the poet, as La Motte who was a physician informs us; and in his medical character did not perceive that ridicule in the idea which the wits and most readers have unquestionably enjoyed. Among the philosophers, one of the most famous disputants of antiquity, Caneades, was accustomed to take copious doses of white hellebore, a powerful purgative, as a preparative to refute the dogmas of the Stoics. Dryden's practice was in fact neither peculiar nor whimsical: he was of a full habit, and no doubt had often found, by experience, the beneficial effects of depletion, without being aware of the cause, which is nothing less than the reciprocal influence which the body and the mind exert upon each other! The simple fact is, indeed, connected with one of the most important inquiries in the history of man; the laws which regulate the invisible union of the intelligent with the material portion of our nature—in a word, the inscrutable mystery of our being; a secret, but undoubted conjunction, which will probably ever elude our perceptions.

This close, yet unknown association—this concealed correspondence of parts seemingly distinct, in a word, this reciprocal influence of the mind and the body, has long fixed the attention of medical and metaphysical inquirers. Perfect health of mind cannot be enjoyed without perfect health of body—nor can the material organs long remain undisturbed if the mind be diseased. This is an admitted axiom—understood by the philosopher and acted upon

by the physician. Neither appear, however, to have made so extensive and useful application of it to morals and to hygiene as it is certainly capable of.

If the mind is disordered whether in its intellectual or moral faculties, we may often discover its cause in some corporeal derangement. Often are our thoughts disturbed by an irritability which we are unable by any effort of the will to control, and which we do not even pretend to account for. This state of the mind, known by the very expressive name of *fidgets*, is a disorder to which the ladies are peculiarly liable—and which may often be traced to a certain degree of nervous excitement, arising from disordered digestion, or an enfeebled state of the frame, the result of errors in diet—an inactive life, or the noise and heat and fatigue of an evening party.

Our temper is the most even and our feelings the most cheerful when the stomach and all the other organs of the body perform with the greatest ease their respective functions.—An excess at table or a meal of indigestible food will very surely render the good tempered morose, and cast a gloomy pall over scenes and prospects which had previously been viewed with delight for their cheerfulness and gaiety. Our intellectual powers are the highest when our stomach is not overloaded; in spring than in winter; in solitude than amidst company; and in an obscure light than in the blaze and heat of noon. In all these cases the bodily organs are evidently acted upon and react upon the mind. A late supper will cause our dreams to present us with images of our restlessness.—Our reasoning faculties are oppressed after a hearty meal—and the brightest imagination will be rendered dim by dining off of roast pig and appropriate sauces. From these and other facts we might almost doubt whether the seat of our intellect is not in the stomach, rather than in the pineal gland of *Descartes*, or in the surface of the anterior lobes of the cerebrum as believed by the phrenological school—and that the most effectual logic to render us reasonable, may be an abstemious diet or a course of physic.

Our domestic happiness in fact depends very often upon the state of our biliary and digestive organs; and the little disturbances of conjugal life may be more efficaciously cured by the physician than the moralist—for a sermon misapplied will never act so directly as abstinence or an appropriate dose of medicine.

The learned Gaubius, an eminent professor at Leyden, notices the case of a lady giving to flirtation, whom her husband, unknown to herself, gradually reduced to a model of decorum by a cooling diet and phlebotomy.

There are unquestionably, constitutional moral disorders which have their rise in some chronic affection of the organs. Some very good tempered, but passionate persons have acknowledged that they cannot avoid the fits to which they are liable, and to which they say they were always disposed, even from the earliest periods of youth.—Now if these paroxysms should be found, as they will in a majority of cases, to be produced by chronic disease of the brain, or heart, or stomach,—is it not cruel to upbraid in place of curing

them. We have known individuals who for years had been noted for their frequent and violent paroxysms of rage, rendered for ever after completely cool under the most trying circumstances by substituting water for wine as a drink and restricting their diet to light broths and vegetables.

There are in fact crimes for which men have been hanged, of the disposition to commit which they might have been cured by physical means—Persons in a state of insanity brought on by unrequited love, by attempting to drown themselves in a river, and being dragged out nearly lifeless, have recovered their senses, and lost their bewildering passion. Submersion, as Van Helmont says, “was formerly happily practiced in England” as a cure for certain mental diseases. The coldness of the water acting as a sedative upon the body, and thus reducing the excited state of the brain which gave rise to the disordered state of its functions. This remedy was also known to the Italians, and in one of the stories of Poggio, is the account of a “mad doctor” of Milan, who was celebrated for curing lunatics and demoniacs by plunging them in water of icy coldness.

CAUSES OF LONGEVITY.

In a very interesting paper published by Dr. Rush in his Medical Observations and Enquiries, we have a detail of the Doctor's Experience in regard to those causes which favour the prolongation of life.

1. *Descent from long lived Ancestors.*—Dr. Rush never met with a single instance of a person who had lived to be 80 years old whose ancestors had not been remarkable for their longevity. In some instances the longevity was on the side of the father, in others on that of the mother, but most generally it was common to both parents. The knowledge of this fact may serve not only to assist in calculating what are termed the chances of life, but it may be useful to the physician. He may learn from it to cherish the hopes of his patients in chronic and some acute diseases, in proportion to the capacity of life they have derived from their ancestors.

2. *Temperance in Eating and Drinking.*—To this Dr. Rush found a few exceptions. He met with one man 84 years of age, who had been intemperate in eating; and four or five persons who had been intemperate in the use of ardent spirits. They had all been day-labourers, and had not commenced drinking until they began to feel the langour of old age. The Doctor was inclined to the opinion that tea and coffee, notwithstanding they evidently impair the strength of the system, do not materially affect the duration of human life. The duration of life is not always shortened by an infirm constitution provided the stimuli which operate upon the several organs be proportionate to their excitability.

3. *The moderate use of the understanding.*—It has been an established truth, that literary men, other circumstances being equal, are longer lived than other people. But it is not necessary, re-

marks Dr. Rush, that the understanding should be employed upon philosophical subjects to produce this influence upon the duration of life. Business, politics and religion, which are the objects of attention common to men of all classes, impart an activity to the mind, which tends very much to produce health and long life.

4. *Equanimity of Temper.*—The violent and irregular action of the passions tends to wear away the springs of life. Persons who live upon annuities in Europe, have been observed to be longer lived under equal circumstances than other people. This is probably owing to their being exempted, by the certainty of their subsistence, from those fears of want, which so frequently distract the minds and thereby weaken the bodies of all persons who are subjected to them. Life rents have been supposed to have the same influence in prolonging life. Perhaps the desire of life, in order to enjoy as long as possible that property which cannot be enjoyed a second time by a child or relation, may be another cause of the longevity of persons who live upon certain incomes. It is a fact, that the desire of life is a very powerful stimulus in prolonging it, especially when that desire is supported by hope. This is obvious to physicians every day. Despair of recovery is the beginning of death in all diseases.

5. *Matrimony.*—In the course of his enquiries, Dr. Rush only met with one person beyond 80 years of age who had never been married.

6. *Sedentary Occupations.*—Dr. Rush did not find sedentary employments to prevent long life, where they were not accompanied by intemperance in eating and drinking. This observation is not confined to literary men, nor to women only, in whom longevity, without much exercise of body, has been frequently observed. The doctor met with an instance of a weaver, a second of a silver smith, and a third of a shoemaker, among the number of old persons, whose histories suggested the foregoing observations.

7. *Loss of the Teeth, &c.*—The early loss of the teeth did not appear to the Doctor to affect the duration of human life so much as might be expected. Edward Drinker, who lived to be 103, lost his teeth thirty years before he died, from drawing the hot smoke of tobacco into his mouth through a short pipe. Neither did he observe baldness or grey hairs occurring in early or middle life to prevent old age. In an account furnished by Le Sayre, mention is made of a man of 80, whose hair began to assume a silver colour when he was only eleven years old.

INTEMPERANCE IN FRANCE.

The following extract of a letter from J. Fennimore Cooper, Esq. to a friend in this country, dated April 20, 1833, and recently published in Boston, affords conclusive evidence that the praise which has been bestowed upon the French people for their superior temperance, is not merited. It strikes a fatal blow at the arguments in favour of wine drinking, derived from the supposed fact that the

people of wine countries are more temperate than others in the use of ardent spirits—and less addicted to intoxication. It confirms also the opinions heretofore expressed in this Journal derived from personal observation.

“The police reports reveal the fact that 25,702 *drunkards were committed to prison* in Paris, in the course of the year. Heaven only knows how many walk free. Of this number 10,290 *were women!* Now, all this has nothing to do with the soldiers or the invalids, who are under military law. I have always told you there was less drunkenness in America, among our native population, than in any other country, even before the existence of temperance societies; and that they who maintained the contrary did not know now to take the necessary circumstances into the account. It is probable that 10,000 drunkards died here with the cholera last year. I rarely go into the streets without seeing more or less drunkards, and I have met them by hundreds in Holland, Germany, Switzerland, Italy and Spain. This vice prevails in the highest classes, too, in Europe, more than is commonly imagined. I have no doubt there are quite as many genteel young men addicted to it in Paris, as in New York, though they are less seen in public.

“Our climate, however, renders the effects more pernicious in a merely physical point of view. The police here is far from being rigid with drunkards, for I see them staggering through the streets every day unmolested. You may remember the manner I taught you to *see* them, for most Americans are so much persuaded that a Frenchman never gets drunk (because the books say so) that they *will not see* them. Many of our people live here half their lives, and fancy themselves among a nation of Anchorites. They find it so “written down,” as Dogberry would say. The drunkards committed at Paris, for drunkenness, are at the rate of seventy a day. To equal this there should be about twenty a day committed in New York. Add to the seventy the soldiers of the garrison, the invalids, &c. and you will probably get double the number.

“The habit of undervaluing ourselves by injurious comparisons with others, not only affects the national character, but it materially impedes the progress of liberal sentiments. When the French government-party wished to check the progress of liberal sentiments in France, it began to abuse us, in every way it could, and it laid particular stress on this item of drunkenness. Nothing is more common, than to hear that democracy and drunkenness go hand in hand; the latter as a necessary consequence of the other. That some of our people desire to bring popular governments into disrepute, at home as well as abroad, I take to be certain, and some too, that fill office, and pretend to *represent* the nation abroad; but as a great majority wish differently, is it not time to weigh the meaning of our words, and to ascertain something of both sides of the question, before we pretend to compare? As for any man’s writing or talking rationally about the comparative habits and merits of Europe and America without personal observation, I hold to be totally out of the question. I do not know a book on the sub-

ject that is entitled to any great attention. Both parties write on preconceived opinions, and half the time, on opinions that are next to worthless."

From the Book of Nature.

MEDUSA.

An intelligent physician of Philadelphia has furnished the best account of the *Medusa*, an order of animated beings but rarely described. We copy his account, which will be found highly interesting and graphic.

Those who have sought relief from the summer heats at Long Branch or Cape May, have probably noticed, in their ramblings along the beach, certain gelatinous transparent masses deposited by the receding tide on the sands. They resemble very large plano-convex lenses, and are devoid of colour except in a few minute points, which appear like grains of yellow sand, or the eggs of some shells embedded in their substance. This has led many to consider them as the spawn of some marine animal.

If one of these jellies be placed in a tub of brine immediately after it reaches the shore, the observer will be surprised to find it possessed of animation. The superior, or convex part, will expand like the top of an umbrella; and from its under surface several fringed and leaf-like membranes will be developed. The remains of numerous threads, or tendrils, will float out from the margin of the umbrella, following the motions of the animal as it swims around the tub. These threads are often several feet in length before they are broken by the sand; they are probably employed both to entice and to secure the prey, and they produce a sharp stinging sensation, when applied to the skin. It is from the appearance and offensive power of these last organs, that seamen have given the animal the title of the sea-nettle, and naturalists the generic name *Medusa*.

I have offered this rude description of the *Medusa*, as a familiar example of the class of animated beings, which are the subjects of the following remarks. They are all alike gelatinous and transparent, and many of them melt and flow away when exposed in the open air to the direct rays of the sun.

Of all the tribes of *Mollusca* which are scattered over every part of the ocean, the most splendid and best known is the Portuguese man-of-war (*physalia*). This is an oblong animated sack of air, elongated at one extremity into a conical neck, and surmounted by a membranous expansion running nearly the whole length of the body, and rising above into a semicircular sail, which can be expanded or contracted to a considerable extent, at the pleasure of the animal. From beneath the body are suspended from ten to fifty or more little tubes, from half an inch to an inch in length, open at the lower extremity, and formed like the flower of the bluebottle. These have been regarded as temporary receptacles for food, like the first stomach of cattle; but as the animal is destitute of any visible mouth or alimentary canal, and as I have frequently seen fish in their cavities apparently half digested, I cannot but consider them as proper stomachs; nor indeed is it a greater paradox in Zoology that an animal should possess many independent stomachs, than that the strange carnivorous vegetable, *saricinea*, should make use of its leaves apparently for a similar purpose.

From the centre of this group of stomachs, depends a little cord, never ex-

ceeding the fourth of an inch in thickness, and often forty times as long as the body.

The size of the Portuguese man-of-war varies from half an inch to six inches in length. When it is in motion, the sail is accommodated to the force of the breeze, and the elongated neck is curved upwards, giving to the animal a form strongly resembling the little glass swans which we sometimes see swimming in goblets.

It is not the form, however, which constitutes the chief beauty of this little navigator. The lower parts of the body and neck are devoid of colour, except a faint iridescence in reflected lights; and they are so perfectly transparent, that the finest print is not obscured when viewed through them. The back becomes gradually tinged, as we ascend, with the finest and most delicate blue that can be imagined; the base of the scale equals the purest sky in the depth and beauty of tint; the summit is of the most splendid red, and the central part is shaded by a gradual admixture of these colours, through all the intermediate grades of purples. Drawn as it were upon a groundwork of mist, the tints have an ærial softness far beyond the reach of art, and warranting the assertion, that they are often dressed in beauty before which the lily would fade, and the rose hide its blushes, and producing some of the sublime phenomena which have astonished the philosopher.

The group of stomachs is less transparent, and although the hue is the same as that of the back, they are on this account incomparably less elegant. By their weight and form they fill the double office of a keel and ballast, while the cord like appendage, which floats out for yards behind, is called by seamen the cable.

The mode in which the animal secures his prey, has been a subject of much speculation; for the fish and crabs that are frequently found within the little tubes are often large enough to tear them in pieces, could they retain their natural vigour during the contest. Deceived by the extreme pain which is felt when the cable is brought in contact with the back of the hand, naturalists have concluded, I think too hastily, that this organ secretes a poisonous or acrid fluid, by which it benumbs any unfortunate fish, or other animal, that ventures within its toils, allured by the hope of making a meal upon what, in its ignorance, it has mistaken for a worm. The secret will be better explained by a more careful examination of the organ itself. The cord is composed of a narrow layer of contractile fibres, scarcely visible when relaxed, on account of its transparency. If the animal be large, this layer of fibres will sometimes extend itself to the length of four or five yards. A spiral line of blue bead-like bodies, less than the head of a pin, revolves around the cable from end to end, and under the microscope, these beads appear covered with minute prickles, so hard and sharp that they will readily enter the substance of wood, adhering with such pertinacity that the cord can rarely be detached without breaking.

It is to those prickles that the man-of-war owes its power of destroying animals which are its superiors in strength and activity. When anything becomes impaled upon the cord, the contractile fibres are called into action, and rapidly shrink from many feet in length to less than the same number of inches, bringing the prey within reach of the little tubes, by one of which it is immediately swallowed.

This weapon, so insignificant in appearance, is yet sufficiently formidable even to man. I had once the misfortune to become entangled with the cable

of a very large man-of-war, while swimming in the open ocean, and amply did it avenge its fellows, who now sleep in my cabinet robbed at once of life and beauty. The pain which it inflicted was almost insupportable for some time, nor did it entirely cease for twenty-four hours.

I might now proceed to describe many analogous animals scarcely inferior in interest, but it is time to notice some individuals of another tribe, residing beneath the surface, and therefore less generally known.

The grandest of these is the *Beroë*. In size and form it precisely resembles a purse, the mouth, or orifice, answering to one of the modern metallic clasps. It is perfectly transparent; and in order to distinguish its filmy outlines, it is necessary to place it in a tumbler of brine held between the observer and the light. In certain directions, the whole body appears faintly iridescent; but there are several longitudinal narrow lines which reflect the full rich tints of the rainbow in the most vivid manner, for ever varying and mingling the hues, even while the animal remains at rest. Under the microscope, these lines display a succession of innumerable coloured scales, or minute fins, which are kept unceasingly in motion, thus producing the play of colours by continually changing the angle of reflection.

The movements of the *Beroë* are generally retrograde, and are not aided by the coloured scales, but depend upon the alternate dilatation and contraction of the mouth. The lips are never perfectly closed, and the little fish and shrimps that play around them are continually entering and leaving them at pleasure. The animal is dependent for its food upon such semi-animated substances as it draws within its grasp by moving slowly backwards in the water, and retains them in consequence of their own feebleness and inability to escape the weakest of snares.

Another tribe of the sea purses, (*Salpa*), though much smaller than the *Beroë*, are more complex in structure, and possess a higher interest in consequence of the singular habits of some of the species. They are double sacks, resembling the *Beroë* in general form, but destitute of iridescence. The outer sack, or mantle, rarely exceeds an inch in length, and is commonly about half as wide. The inner sack is much smaller, and the interval between these forms a cavity for the water which they breathe, and for some of the viscera. Their visible organs are, a transparent heart, which can only be seen in the strongest light; a splendid double row of whitish bead-like cavities, forming a spiral line near one extremity, and supposed to be either lungs or ovaries; numerous broad flat pearly muscles, barely distinguished by their mistiness; and an alimentary canal, as fine as horse-hair, with a slight enlargement at one spot, which has been called a stomach. This enlargement resembles, both in size and colour, a grain of sand. From the base of the animal arises two longer and four or five shorter conical spines of jelly, curved into hooks at the points, by means of which numerous individuals attach themselves together in double rows like the leaflets of a pennated leaf. Cords of this kind, composed of forty or fifty animals, are often taken, but they separate and re-attach themselves at pleasure.

To the gregarious habits of this little molluscus, we owe a very singular and striking phenomenon, which I have never seen noticed by naturalists, although we frequently witnessed it near the Cape of Good Hope. The animals are occasionally found associated together in such countless myriads, that the sea is literally filled with them, sometimes over three or four square miles of surface, and to the depth of several fathoms. The yellow spots which

have been described, being the only coloured portions of their body, give to the whole tract the appearance of a shoal, or sand-bank, at some distance below the surface. The deception is heightened by the great smoothness of the water at these places, particularly in calm weather; for so closely are the animals crowded together, that the water is rendered in a manner less fluid; the smaller billows break around the margin and are lost, while the heavy waves of the Southern Ocean are somewhat opposed in their progress, and take on in a slight degree the usual appearance of the ground swell. There can be but little doubt that many of the numerous shoals laid down in the charts of this region, but which have never been seen by any but the supposed discoverers, have been immense banks of these gregarious molluscæ. In sailing through a tract of this description, in which the progress of the ship was very sensibly retarded, I have dipped up with the ship's bucket a greater bulk of animals than the water in which they were suspended. How wonderful are the effects produced by the minute links of creation!

SYSTEMS OF QUACKERY.

The goodly city of Philadelphia, famed for the prudence and the wisdom of those who dwell within its border—for its cleanliness, its learning, its science and its taste, is at the present moment filled with all kinds of new inventions to cure diseases in the most certain, easy and simple manner; with the least suffering and inconvenience to the patient, and the greatest amount of profit to the prescriber. Judging from what is daily transpiring before our eyes, we might with propriety pronounce this to be pre-eminently the age of quackery—but a quackery of far higher and more assuming pretensions than that which gave rise, a few years ago, to the panaceas, catholicons and other cure-alls, now so fast descending into oblivion. Quackery slinks not now into a corner; it hath its systems—its schools—its professors. It is no longer supported by the craving wants or the impudence of single rival Charlatans, but in all its varied shapes it is maintained by numerous and zealous partisans, who have, in more than one instance, formed themselves into regular societies for its advancement and propagation. The sick have certainly now a fair chance for obtaining a speedy termination to their sufferings. The regular doctors, as they have been termed, are in danger of being entirely set aside. And why not? Has it not been proved from the chair of a steam-doctor college, that from the very nature of their studies they are precluded from becoming acquainted with the structure of the human frame, the laws by which it is governed in health and disease, and the nature of remedial agents? Have they not been convicted in a hundred announcements from learned Morisonian, Thompsonian, Hygeinic, and Botanic professors, of dealing destruction to their patients by the administration of such “horrible metallic poisons” as gum water and chicken soup—leeches, blisters and water gruel—magnesia, castor oil and quinine—rhubarb, ipicacuanha, colchicum, and the like? Did they not introduce vaccination? And is there not some suspicion of their having had a hand in the introduction of the cholera? To take the place of these “pests of society,” we have first, the, so called, disciples of the British Col-

lege of Health, with their one universal, never-failing vegetable specific, which is to exterminate the very tendency to disease.—Then the Thompsonians, with their hot bricks and vinegar steam, with their mixtures of cayenne pepper, camphor and brandy, from No's. 1 to 50, inclusive. Then the Botanists, with their lobelia, skunk cabbage, and bone set, who teach that all vegetables are innocent remedies—all minerals, including chalk julep, poisons. After them follow the *natrel* bone setters, with whom the cause of all diseases is dislocation of the limbs, and all remedies, to use the language of one of this school, “a *natrel* slight of hand and elbow grease.” And then the Homoeopaths, who administer remedies only in the billionth part of a drop or grain; and, finally, the animal magnetists, or rather, the animal magnetiser, who sets people to sleep by the winking of his eyes, charms away incurable diseases by the nod of his head, and performeth many other wonders too numerous to mention.

Either or all of these gentlemen offer to cure the most desperate cases without fail, and profess to be influenced in the offer of their services solely by motives of pure benevolence. They are all the sworn enemies and sure conquerors of disease. Can people be so perverse as not to accept their services—can they conscientiously turn a deaf ear to men who, if they were called in *sufficiently early* in all cases, would convert our grave yards into building lots, our sextons into gardeners, our hearses into pleasure carriages, our undertakers into waiters on wedding parties and christening dinners? But alas! for the complete triumph of art and skill over misery, disease and death!—many weak minded individuals are so perverse as to prefer incurring the danger of being poisoned under the hands of the regular M.D.'s to procuring certain health from the pills and potions, the tricks and manœuvres of these advertising philanthropists, whose contempt for money in the way of fee or reward is only equalled by their love of truth. The world, in fact, is so fond of change and novelty, that we might almost venture to predict that in a very short time the occupation of all the present race of never-failing steam, botanic, magnetic, atom dose, bone setting doctors, like that of Othello's, will have passed away, and an entire new race will be quickly ushered into notice, and receive an equal share with the former of public patronage and confidence. We know one who, having failed as a gentleman's shoeblack, is determined to try his fortune before long as a brusher up of men's health. He has invented a new doctrine which has struck us by its simplicity and excellence. The following is an outline of its peculiarities. He assumes it as an axiom that the efficacy of all remedies depends upon either an opposition or affinity between their name, colour, or other properties, and the name, cause or prominent symptoms of the disease in which they are given, or the resemblance of their name or shape with the part in which the disease is seated. The less active the properties possessed by the remedy, speaking in the usual terms of art, the more certain and powerful its effect. To act properly, however, the remedy must be collected, prepared and administered in a particular manner, known only to the author

of this theory. Carrying these principles into practice; suppose the patient is laboring under a disease of debility, now one of the strongest things in nature is steel, therefore steel is the remedy adapted to his case.—But on the other hand, suppose him *affected with a disease caused by an excess of strength*, you must give him water—“as weak as water,” being a well known truth. In asthma the patients are short breathed; let them have then the lungs of a fox, an animal noted for strength of respiration. In jaundice the skin is yellow, therefore is the disease to be removed by an infusion of termuric or yellow berries, or by the eating of carrots or yellow peaches. If a discharge of blood is to be removed, bloodstone, tincture of cochineal or beet juice will be efficient. If diminess of vision afflict the patient, the herb eye bright will restore his sight. If the disease affect the head, give a *poppy head*—if the teeth, a decoction of lion’s tooth, (Dandelion)—if the lungs, lungswort, etc. etc. We are persuaded this doctrine and practice will rapidly attract public attention, and to use the medical advertising phrase, “will do more good than any of the syrups and mixtures *anonymously* vended or contained in the pharmacopœia of any college.”

PODOLOGY.

Among the many *ologies* of the age, that which treats of the feet is not, assuredly, the least important. Passing over the use of these important members in walking and dancing, etc. we shall for the present speak of their disorders.

All are aware to how great a number of persons of both sexes walking is rendered extremely painful by the existence of corns upon the feet. But however great may be considered the evils resulting from corns, they are trifling in comparison with those which very many experience from other disorders of the feet, and especially from inversion of the toe nails, and from swelling and inflammation of the lower joint of the great toe. To such the slightest movement of the feet is often productive of the utmost torture, and in consequence they are not only prevented from enjoying one of the most pleasant and healthful species of exercise, for which nature has adapted the frame of man, but even when standing or sitting, they experience almost constant suffering.

The nail most frequently inverted is that of the great toe. The disease consists properly in the edge of the nail being bent downwards, and made to bear firmly upon the tender skin beneath, and when not remedied at an early period, it penetrates into the flesh, causing violent inflammation, which terminates at length in a sore always intensely painful and very difficult to heal. The whole of this is occasioned, in the greatest number of cases, by wearing shoes too small in size or improperly shaped. A shoe of too contracted dimensions, by pressing upon the upper surface of the nail, and at the same time crowding the flesh at the outer side of the toe against its sharp edge, cannot fail to cause undue irritation of the parts with which the latter is in contact, and finally to produce

severe inflammation and ulceration. This is rendered of more frequent occurrence by the improper form of the shoes now worn in addition to their small size.

The great toe, after it rises from the body of the foot, when perfectly unconstrained, inclines but very slightly inwards towards the other toes. When, however, the foot is thrust into a shoe the breadth of which is diminished over the toes by a rapid tapering from its middle towards its point, we can easily perceive that the great toe must be pressed by it against the one adjoining, over which it is caused in many instances partially to ride; at the same time, as the nail yields but little, the flesh on its outside is firmly compressed by the shoe against its edge, and the latter soon becomes firmly imbedded in it.

The swelling and inflammation of the lower joint of the great toe is produced by the same causes; by the pressure, namely, of a tight shoe upon that part; which is rendered more projecting, and consequently more liable to suffer from such pressure, in consequence of the bending inwards of the toe by the improper shape of the shoe in common use. The joint becomes at first exquisitely tender and more or less swollen—rendering the act of walking, or even standing, extremely painful. After a period of time, in proportion to the amount of exercise which the individual indulges in, the swelling of the joint increases, violent inflammation occurs, and an abscess of considerable extent is formed—and frequently the motion of the joint is forever destroyed.

Females are particularly liable to this painful affection, as well as to that arising from the inversion of the toe nail, in consequence of a ridiculous pride inducing them to attempt the reduction of the size of their feet by wearing shoes of the most contracted dimensions.

The occurrence of both the evils described may always be prevented by the use of shoes adapted in size and form to the natural shape and dimensions of the foot. When, however, folly or neglect has caused or permitted this occurrence, in addition to a reform in the size and shape of the shoe, other means will be required for the removal.

On the first intimation of the edge of the nail penetrating the quick, or imbedding itself in the flesh, to prevent the inconvenience to which this would give rise, if neglected, the feet should be bathed for some time in warm water, and the edge of the nail being gently raised by some appropriate instrument, a piece of soft lint should be laid beneath it. This will prevent the edge of the nail from pressing upon the skin beneath and cause it to take a horizontal direction. When the nail is of considerable thickness, or is bent considerably downwards, it should be scraped lengthwise with a penknife nearly down to the quick. The foot being then placed in warm water, the edge of the nail may be readily raised and the lint introduced beneath. The lint should be renewed twice a day, and its use should be persisted in until the edge of the nail has taken its proper direction—which it will generally do in a very short time,

provided attention be at the same time paid to the suitable shape and size of the shoes.

When swelling and inflammation of the joint of the great toe has taken place, the individual should remain at rest for a few days with the feet kept in an elevated position and without a shoe. If the inflammation is but slight, and the distortion of the toe has not been of long continuance, this will very generally be sufficient for the removal of the disease. Bathing the foot frequently in warm water, and the application to the joint of a common bread and milk pultice, will in many cases accelerate the cure. Subsequently the use of shoes of proper shape and dimensions will prevent the recurrence of the disease. When, however, the swelling and inflammation are considerable, in addition to rest and elevated position of the foot, leeches and other remedies will be demanded, in the use of which the advice of a physician should be consulted. Unless a proper treatment, in such cases, is early resorted to, much suffering, or even a degree of permanent lameness, may be induced.

It occasionally happens, that persons affected with this disease are unable, without great inconvenience, to confine themselves entirely to the house until a cure is effected. When this is the case, we would advise the wearing of a large shoe from which the upper leather has been entirely cut away from the point to below the affected joint. Attempting to walk about in an uncut shoe, however ample its dimensions, or in one from which only a portion of the upper leather has been removed directly over the swelling, will not only fail in procuring the patient ease from pain, but will increase the swelling and inflammation.

When the great toe has been for a long time distorted from its natural position, the shoes subsequently worn should be adapted in shape to the existing form of the foot.

HYPOCRITICAL MODERATION.

The name of the latter place (Spolatro, Salona) recalls to mind the era of Diocletian, who retired hither upon his abdication of the government of the Roman world (A. D. 304). History rectifies the error of misconception, and shows the actions of men in their true light,—thus the abdication of Diocletian has been used to be cited as an act of self-denial, ranking with the similar recorded events of illustrious monarchs; but the traveller, who beholds the lengthened fascade and lofty porticoes, and temples of the palatial residence of the retired emperor, will form a different estimate from the usual one adopted respecting this act. Diocletian forsook the world, because health and vigour of mind had forsaken him: new rivals had grown up, who, his sagacity foresaw, would seize the reigns of power by force or by concession; he therefore wisely chose the moment which fate had preserved for him, of withdrawing to a retreat of Cæsarean dignity, surrounded with the splendour and riches of the imperial throne.—*History of the Ottoman Empire.*

JOURNAL OF HEALTH AND RECREATION.

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We have been much pleased with two articles in successive numbers of the '*American Annals of Education and Instruction*:'—the first, on swimming, as a branch of physical education; the second, on cold bathing, similarly used. The principle inculcated by the writer, "that the power of bearing the cold bath without injury, is in exact proportion to the increase of animal heat previous to the use of it," is a sound one. It is that which has been advanced on former occasions in this Journal; and has been more fully developed, and illustrated by more pertinent analogies and a larger series of facts, in Dr. Bell's work on Baths and Mineral Waters, than in any other with which we are acquainted. The popular belief of the danger of cold bathing when the body is heated, sanctioned by the false theory of physicians that cold, and of course cold bathing, is a stimulus, has been productive of incalculable mischief. Persons have been advised always to wait, after having been heated by exercise, until their bodies were cool, before they plunged into the water. Precisely the opposite rule ought to be followed, viz: immersion in a river or in the cold bath, when the heat of the skin and the sensation of heat throughout the system are decidedly above the natural standard, or are such that the individual does not rapidly part with his caloric by exposure to a colder medium. By remembering that the effects of cold air and of cold water applied to the skin are to abstract the animal heat, to diminish the activity of the circulation and to blunt sensibility, we shall have juster notions of the circumstances under which cold bathing can be had recourse to with most advantage. In *fevers* and some other forms of disease, the hotter the skin, the safer and more beneficial will be the cold bath, whether by shower or immersion. In cases of great determination of blood to the head, throbbing temples and excessive heat, with often violent raving, we do not hesitate to apply bladders containing cold spring water or powdered ice to the part thus affected, or to pour a stream of cold water on the crown of the head and nape of the neck. The rule then is uniform that, whether in health or in disease, the hotter the skin and greater the sensation of heat and thirst, the more beneficial will be the bath, and the *colder* may be the water and the *longer* the immersion. To stand stripped until

the heat developed by exercise or labour is gone, and the individual is almost shivering, before he ventures into the river or bathing tub, is, therefore, a practice as opposed to sound theory as to bodily health and comfort. There is much less danger in plunging into cold water, while the body is in a full *warm* sweat, than when, after a time, the skin is cool and yet damp with sweat. Persons ignorant of the true principle which should guide in the use of the cold bath, are greatly surprised at the common Russian fashion of bathing. In Russia, while the bather is sweating at every pore, and his skin red and heated by exposure to vapour of an elevated temperature, he will have bucket-fulls of cold water dashed over him, or will rush out and roll himself in the snow. Now in this case, what increases the wonder of the ignorant is precisely that which deprives the affair of all its marvellous character in the minds of the well informed, and those initiated into the laws of the animal economy, viz: the prior exposure of the body to a high heat.—Alexander the Great was nearly killed by his plunging into the river Cydnus after a fatiguing days march, and while exhausted by long continued exertion. But the same Alexander early in the day and while merely heated, without being enfeebled or exhausted, would have found refreshment and pleasure from a similar immersion. On the same principle, a traveller or labourer will find it safer and better to bathe in the early part of the day, than towards evening. Another consideration is to guide us, also, in choosing the forenoon or time before dinner, viz: that cold and indeed every other kind of bathing ought to be had recourse to with an empty stomach, or when this organ is not actually employed in digestion. Early in the morning, before breakfast, is a favourite hour with many and is often recommended by the physician. But if the powers of life are feeble and the invalid is in a state little above the common excitement of the system, he cannot bear the cold bath at this time; it chills and enfeebles him. Hence, in such a case, and it is by no means unfrequent, two or three hours after a light breakfast, when the system is somewhat excited, is the time to be chosen.

The above directions are susceptible of modification where space and the strength of the bather or invalid allow of *swimming*. In such a case, the tendency of the cold water to abstract heat and to diminish the excitement of the system, is somewhat counterbalanced by the active exercise taken in the water in the movements of swimming.

We have to renew the expression of our regret that more attention has not been given to swimming, as a necessary branch of physical education—promotive as it is of health, and personal safety, and

enabling one in moments of imminent peril, to save a fellow creature from a watery grave.

YOUNG LADIES' EDUCATION.

"It seems sometimes odd enough to me, that while young ladies are so sedulously taught all the accomplishments that a husband disregards, they are never taught the great one he would prize.—They are taught to be *exhibitors*; he wants a *companion*. He wants neither a singing animal nor a drawing animal, nor a dancing animal, he wants a talking animal. But to talk they are never taught, all they know of it is slander, and that comes by nature."—*Godolphin*.

A LIFE OF PLEASURE.

"But the cause of a life of pleasure is its aversion to useful activity. Talk of the genius that lies crushed and obscure in poverty! Wealth and station have also their mute chilling and inglorious Hampdens. Alas! how much of deep and true wisdom do we meet among the triflers of the world? how much that in the stern middle walks of life would have obtained renown, in the withering and relaxed air of loftier rank, dies away unheeded! The two extremes meet in this,—the destruction of mental gifts. Godolphin was one among many instances of the evil influence an indolent aristocracy creates, even for its favourites. But the world is progressing to that state in which the two antagonist classes must cease. In America they have ceased already, but in America there are yet wanted what philosophy, the arts and literature, must ultimately teach and diffuse—the refinement which softens equality, and the high moral tone which counterbalances the huckstering spirit that belongs to commerce."—*Ibid*.

The work, "*Godolphin*," from which we have made the above extracts, is by a man of an acute and searching mind, who unveils some of the hidden springs of action; and shows in his hero the necessity of every individual, desirous of being himself happy and to others useful, grappling with the world by engaging in a series of positive duties. No man can long keep aloof, sighing all the while for an ability to come up to an ideal standard of excellence, and yet hopeless of himself attaining it, and dissatisfied with those around him because they fall so far short of it. An eloquent discourser, a warm advocate of whatever is noble and tasteful, he remains an inefficient actor—his speeches are lost in the winds.—Others seize the means which he despises, and accomplish, in more homely fashion, reforms and ameliorations, which to him seemed as only to be brought about by recondite philosophy and heroic devotion. We hardly know a better illustration of the faculty of ideality, of the phrenological system, than in the character of *Godolphin*.

MEDICAL EFFECTS OF MUSIC.

Amongst barbarous or half civilized nations, diseases have been very generally attributed to the influence of evil spirits. The depression of mind which is commonly attendant on sickness, and the delirium accompanying certain stages of disease, seem to have been considered as especially denoting the immediate influence of some demon. The effects of music in elevating and depressing the excitement or energies of the mind, or what is popularly called the animal spirits, were obvious to early observation. Its power of attracting strong attention may in some cases have appeared to affect beneficially even those who labored under a considerable degree of mental disorder. The accompanying depression of mind, or indifference to ordinary excitements, was considered, and with great propriety, to be a principal symptom of the disease; and music was prescribed as a remedy to remove it, when experience had not ascertained its actual cause.

Homer, whose heroes exhibit high passions, but not very refined manners, represents the Grecian army as employing music to stay the raging of the plague. The Jewish nation, in the time of king David, appears not to have been much further advanced in civilization—accordingly we find David employed in his youth to remove the mental derangement of Saul by his harp. Pindar, with poetic license, speaks of *Æsculapius* healing acute disorders by means of soothing songs,—but *Æsculapius*, whether man or pagan deity, or partly both, is a physician of the days of barbarism and fable. Pliny scouts the idea that music should have any influence upon real bodily injuries; but quotes Homer on the subject, mentions Theophrastus as suggesting a tune for the cure of sciatica, and Cato, as entertaining a fancy that it had a good effect when limbs were out of joint; and that Varro thought it good for the gout. Aulus Gellius cites a work by Theophrastus, in which music is recommended as a specific for the bite of the viper; while Kircher's "*Misurgia*" and Swinburne's *Travels*, in common with works of a still more modern date, attest the beneficial effects of music on those who are bitten by the Tarantula. Jacchinus a very old writer, calls music a "most forcible medicine." Cassiodorus recommends it as a powerful narcotic "lulling the senses into sweet oblivion in the lap of sleep." Bodine speaks of its efficacy in the cure of St. Vitus' dance, and other ancient writers, as well philosophers as physicians, pronounce it an infallible remedy for epilepsy. The ancient writers and those of the middle ages record,

indeed, miracles in reference to the medicinal powers of music—a fever they tell us can be removed by a song, the pestilence driven away by the sweetness of an harmonious lyre, convulsions appeased by the harp, and deafness cured by the sound of the drum.

In proof of its powers in all the diseases of the mind a host of authorities might be adduced. Pratensis affirms that it is “*mentis medicina*,” the medicine of the mind; and Scaliger explains its effects by the trembling and dancing sound it produces becoming mixed up with the animal spirits. Ismenias, the Theban, and Chiron the Centaur, are said to have cured despair and melancholy by music alone; and Asclepiades we are assured, “helped many frantic persons by this means;” the same is also asserted of Clinias and Empedocles. Shakespeare and most of the early English poets allude to the power of music “helping mad men to their wits,”—and even the philosophic Armstrong admits its efficacy to expel disease. Sir William Temple seems to have given entire credit to the stories told of the power of music over the diseases of both mind and body—but in this we are not to be surprised when we recollect that the idea of a ghost could make Johnson tremble, that the great Bacon reposed the utmost confidence in amulets, and that the celebrated Boyle gravely advises the thigh bone of an executed criminal as a potent remedy in dysentery.

INCONSISTENCY.

Behold the nature of man; the littleness and inconsistency of his character adhere to him even in the hour of his death. It has been repeatedly observed, that an infinitely greater number of individuals terminate their lives by drowning in the summer, than in the winter; the dread of the cold shock, of the immersion possessing more influence over the minds of the fastidious wretches than the dread of the dread hereafter.—*Miserrimus*.

DEPRAVED TASTES.

Persons have been known to eat with pleasure spiders and woodlice. In parts of Brittany and Poitou, the adder is brought to table under the name of hedge-eel. In other places soup is made out of the same reptile or of scorpions. Certain barbarian people feed on ants and grass-hoppers, fresh, or preserved after a particular fashion. In the island of Madagascar, these animals are preferred to the best fish. The inhabitants of Cochin-China prize most highly rotten eggs, for which they pay dearer than for fresh ones. In Great Britain game is most relished when a little turned—that is

when putrefaction has commenced. In France they eat without ceremony snails and frogs. Some savage tribes seem to live chiefly on potters' earth. In China the nobles and the wealthy are passionately fond of bird's (swallows) nest soup. To say to a Chinese that he eats bird's nests is equivalent to saying that he lives in opulence and belongs to the higher classes. We must bear in mind, however, that these nests are not made of earth or clay, like those of our swallows, but of a matter resembling fish-glue, which the bird obtains from some marine substance.—*Pere de Famille*.

SWIMMING SCHOOLS.

These are very common in Europe. Some of the most respectable are found at Paris, Vienna, Munich, Berlin and Breslan. The only one in the United States is at Boston.—Among the advantages of swimming, the following are enumerated by a writer in the *American Annals of Education and Instruction*. 1. It puts in our power the means of preserving our lives and perhaps those of others in situations of peculiar peril, from which none of us can claim exemption. 2. It counteracts the ill effects which might otherwise arise from cold bathing. 3. It is so much better exercise than this latter. It strengthens the lower extremities, the muscles of the chest, and the abdomen, the lungs, the spine, the neck, and the arms, and indeed the whole system. 4. The pleasure which every one feels in being able to master a new element, as well as the delight which is felt in the exercise itself, is an argument in its favour.

The facility with which this art is acquired is greater than one might at first be led to suppose. In the Boston swimming school no one who has made a fair experiment, has ever failed of becoming an expert swimmer, in *one term*, or about four months; that is, by spending from ten to fifteen minutes a day during this period. Out of more than 200, the number that attended last summer, there was not one who failed to acquire the art of maintaining himself above the water, with the utmost ease, for half an hour at a time. It should also be observed that they who are taught swimming according to the most approved rules of the art, ever after swim with more ease, as well as dexterity, than those who are not so taught.

The whole *amount of time* spent in teaching the most unapt scholars, does not exceed twenty-four hours, while with a large proportion it does not exceed three. The capacity to learn is not confined to any age. It may be commenced as early as five or six; and there are many instances of persons learning to swim well after forty. An eminent judge in the courts of Massachusetts, last summer, acquired the power of swimming half an hour with ease, in a very few lessons.

A SOUTHERN CLIMATE FOR INVALIDS.

It may be in the recollection of many of our readers that, in a former volume of this Journal, we were led to give publicity to very

favourable views of the climate of St. Augustine, in East Florida, as eminently beneficial to invalids labouring under pulmonary disease. More recent accounts and enlarged information would lead us to modify somewhat our praises of this spot, and to confess that its reputation, like that of Montpelier and the coast of Province in France, Pisa and Naples in Italy, Valencia in Spain, the Islands of Madeira and Teneriffe, must undergo considerable abatement, even if we do not admit it to be entirely surreptitious. The late Dr. James Cox, who gave us the favourable statements of the climate of St. Augustine, which we published at the time, afterwards retracted his opinions, and confessed that he would not advise invalids to resort to this spot on the strength of his later knowledge of all the circumstances of the case.

Doctor L. V. Bell, to whose letter (*Medical Magazine*, June, 1833), we would refer the medical reader for further details, concludes by affirming that he neither saw nor heard of any well marked case of consumptive disease being cured by the climatic influence of St. Augustine; and he believes "that many individuals, who were seduced there by misrepresentations, did not actually live as long as they would have done at the north; the fatigues, exposure, want of medication, nursing, proper diet, &c., during an inclement winter passage, on a dangerous and harbourless coast, added to the severe disappointment of finding none of their expectations fulfilled as to the place itself, undoubtedly accelerated the inevitable fate of the consumptive."

INFLUENCE OF THE MIND ON THE BODY.

We have before us a volume recently issued from the London press, entitled "*Influence of the Troubled Mind on the Health.*"—The subject is certainly not a very new one, but it is not on that account the less interesting. In the hands of the present author, Surgeon Fletcher, it has not however received any additional illustration. To some of his phrases we should decidedly object, as for example, to *mental indigestion*, in the sense in which he employs it. When a young lady reads nothing but novels, romances and lighter poems—we may say she will have a mental indigestion. When a student reads with nearly equal avidity Godwin's Political Justice and Paley's Evidences,—Voltaire's Philosophical Dictionary and Butler's Analogy,—the Life of the wonderful Crichton and Lord Bacon,—Thomas Aquinas and Locke, we may be sure that he will suffer from a mental indigestion. It is a disease not uncommon in modern seminaries for the education of young persons,—in which all

the sciences and belles lettres are pretended to be taught by cramming odds and end of each into the mind of the youthful aspirant after accomplishments. But Mr. Fletcher does not speak of mental indigestion in this way. He means impeded function of the stomach, brought on and kept up by a strong impression on the nervous system, through the means of mental disturbance—excessive excitement, anxiety or depression. According to his nomenclature, we should have respiratory indigestion, and perspiratory and locomotory indigestion; and the like perversions of language and physiology. In fact, he seems to have rather confused notions of his subject, as when he places in the same sentence, as if for the purposes of marked contrast, ‘mental indigestion,’ ‘physical indigestion,’ the latter brought on by *stomach*, (not *stomachic*) irritants.

Mr. Fletcher, introduces sketches of cases which came under his observation, or were placed under his care—illustrating the subject of his book. Among them is a narrative of her own case, drawn up by the patient herself—followed by the acknowledgment: That, all her misfortunes and miseries were attributable to a bad education, which permitted the formation of an imaginary or romantic, rather than a rational character.

We can understand the feelings of the unfortunate, described in the following sentence, from the nervousness which we are ourselves so apt to experience when a bill is *presented* to us. “The blight of the simoom is scarcely more destructive to the nervous man, who is attached to money, than a heavy returned bill.”

Our restricted limits will not allow of any thing like a regular analysis and review of Mr. Fletcher’s work—even if its merits were such as to entitle it to this kind of notice. In his cases of *distressed nervous system from grief* and of *mental indigestion from fear*, and *irritable brain from wounded variety*, we recognize neither novelty of principle nor practice, however much he may have attempted to give freshness to old ideas, by novelty or rather misapplication of language.

It gives us pleasure to learn that a second edition of the valuable work of *Dr. James Rush, on the Voice*, is announced for publication. We may regard this fact as satisfactory evidence of the author having been duly appreciated in his former labours—without, be it said, the aid of newspaper puffs or the trumpetings of Quarterlies.

We have received the *twelfth* number, being the last of the *second* volume of Doughty’s *CABINET OF NATURAL HISTORY AND AMERICAN RURAL SPORTS*—together with an extra containing a Biogra-

phical Sketch of that amiable man and zealous naturalist, William Bartram. Fortunately for the encouragement of natural history and the instruction and amusement of the public, this work of Mr. Doughty's will be continued. "The first number of the third volume will," the publisher assures us, "be issued in due season, and a number will follow regularly every month, until completed. Several drawings and engravings to embellish this volume, have already been executed with great fidelity, and are of surpassing beauty, as it is understood the third volume shall far exceed in splendour its predecessor."

Announcement of approaching Death.—'And here you will forgive me, perhaps, if I presume to state what appears to me to be the conduct proper to be observed by a physician in withholding, or making his patient acquainted with, his opinion of the probable issue of a malady manifesting mortal symptoms. I own I think it my first duty to protract his life by all practicable means, and to interpose myself between him and every thing which may possibly aggravate his danger. And unless I shall have found him averse from doing what was necessary in aid of my remedies, from a want of a proper sense of his perilous situation, I forbear to step out of the bounds of my province in order to offer any advice which is not necessary to promote his cure. At the same time, I think it indispensable to let his friends know the danger of his case the instant I discover it. An arrangement of his worldly affairs, in which the comfort or unhappiness of those who are to come after him is involved, may be necessary; and a suggestion of his danger, by which the accomplishment of this object is to be obtained, naturally induces a contemplation of his more important spiritual concerns, a careful review of his past life, and such sincere sorrow and contrition for what he has done amiss, as justifies our humble hope of his pardon and acceptance hereafter. If friends can do their good offices at a proper time, and under the suggestions of the physician, it is far better that they should undertake them than the medical adviser. They do so without destroying his hopes, for the patient will still believe that he has an appeal to his physician beyond their fears; whereas, if the physician lay open his danger to him, however delicately he may do this, he runs a risk of appearing to pronounce a sentence of condemnation to death, against which there is no appeal—*no hope*; and, *on that account*, what is most awful to think of, perhaps the sick man's repentance may be less available.

'But friends may be absent, and nobody near the patient in his extremity, of sufficient influence or pretension to inform him of his dangerous condition. And surely it is lamentable to think that any human being should leave the world unprepared to meet his Creator and Judge, "with all his crimes broad blown!" Rather than so, I have departed from my strict professional duty, done that which I would have done by myself, and apprized my patient of the great change he was about to undergo.'—*Sir H. Hallford's Essays.*

TEMPERANCE.

Six cents a day, spent for rum, amounts to about twenty-two dollars a year. How many are there, who spend double that sum, for ardent spirits, whose families are actually in want of the necessities of life. Such people are always complaining about hard times, heavy taxes, the high price of provisions, and the oppressions the poor have to suffer. Their poll tax perhaps is \$1, one twentieth part of the *rum* tax, even though they spend but 6 cents a day.—But those who spend twelve cents a day for rum, (and every hard drinker does) waste as much money as will find their families in bread. Twelve cents a day is equal to the tax on fifty or sixty thousand dollars. Thus we see, some people who complain of *high taxes*, and who perhaps are not worth ten dollars, pay what is equal to the usual tax on *sixty thousand* dollars, to gratify their taste for rum. Such people may justly complain of hard times, *high taxes*, high prices of provisions, and oppression; but let them remember they are themselves the cause of the whole of it.—*Trumpet*.

THE EDITORS' VALEDICTORY.

It will be seen by the subjoined announcement of the publisher, that "The *Journal of Health and Recreation*," terminates with the present number.—The editors, while bidding their readers and the public farewell, in their present capacity, will not detain them long. When, four years ago, the *Journal of Health* was commenced, few of their medical brethren anticipated its continuance beyond a twelvemonth, and some predicted failure before the expiration of that period. The reason assigned was indeed rather a strange one, coming as it did from gentlemen, some of whom were well read in their profession. It was: that sufficient matter, germane to the subject, could not be obtained to fill the pages of such a work. A very slight acquaintance with hygiene, ought to have prevented the forming of so erroneous an opinion, by showing the great number and variety of agents by which the animal economy is impressed and its functions constantly modified. Progressive civilization and refinement, also, give rise to incessant and important changes in this respect. In addition to the hygienic rules applicable to all persons, there are others in more peculiar relation with certain classes, such as agriculturists, mariners, manufacturers, &c. The editors cannot at this time convey a better idea of the copiousness of the subject of hygiene, than simply to state, that, notwithstanding their continued exertions to introduce the greatest variety of topics and illustrations into the *Journal of Health*, there are yet; after the lapse of four years, and the publication of four volumes of the work, many points of importance which have not been discussed—many valuable calculations and statistical details for which space has not been allowed. Never, it may be added, at any former period have the editors had more ample or diversified materials for hygienic instruction than those which are now at their disposal.

Of their past course as conductors of this *Journal*, it becomes not them to speak, unless it be to aver, that, throughout, they have been sedulously attentive to advance only doctrines which they believed to be sound, supported and explained by statements and facts which they regarded as authentic and accurate. In no instance have they trimmed their sails with a view to catch the varying breeze of popular applause, nor to propitiate favour from any individual, set,

or party, by a sacrifice of their own honest convictions of truth and right. If they have been steadily opposed to tyrannising appetites and mischievous customs,—if they have failed to nurture long cherished but ignorant prejudices, their opposition was prompted purely by a desire to see an amended order of things, and without reference to the effect on their own worldly interests.

It will not perhaps be out of place to remark, in reference to the history of the *Journal of Health*, that its title, complexion and character originated with, and have been maintained by, the editors alone. There are not probably more than eight or ten pages in the four volumes, which have not been written or selected by them. The sole aim of the first publisher and proprietor was to have a popular work,—in which, he thought, might be blended descriptions of diseases and accounts of their treatment, with rules of hygiene. Believing this scheme to be but a modification, and that not the least harmless, of quackery, it was promptly rejected by the editors, to whom was and has ever since been yielded the entire guidance of the *Journal*. It differs from all other periodicals to which by their titles it would seem to be akin. The *Gazette of Health*, and the *Oracle of Health*, in London, and the *Gazette de Sante* in Paris, contain in addition to hygienic directions, medical prescriptions and accounts of diseases. Some of them, by a strange inconsistency, while rating quacks and quackery severely, in the body of the work, exhibit advertisements of quack medicines on their covers. The *Annales d'Hygiene* is too diffuse, and partakes too much of an essay character to have served as a guide, even had it been in existence when the *Journal of Health* was begun.

Notwithstanding this restriction to subjects purely hygienic, and the still farther limitation which the editors imposed on themselves, by an avoidance of allusions or phraseology that would be in aught unfit to meet the eye of any member of a family, the wish of the publisher was fully gratified, in the popularity and extensive circulation of the *Journal of Health*. But, intoxicated with a success so unparalleled, he was led to publish several other periodicals of the most diverse nature. His failure in these attempts was, by reaction, extremely prejudicial to the interests of this *Journal*, by alienating the good will of agents and other warm friends of the work throughout the country. From the effects of his mismanagement and misconduct, the present proprietor and publisher has not been able to recover it; and for the reasons assigned by him it is now brought to a close.

JOHN BELL, M. D.

D. FRANCIS CONDIE, M. D.

PUBLISHER'S NOTICE.

The publication of the *Journal of Health and Recreation* will cease after the appearance of the present number. It is not a little mortifying to be obliged, in a spirit of becoming frankness and justice to the real friends of the work, to disclose the reason which imperatively calls for this measure. It is simply the failure of so large a number of the subscribers to pay their arrearages.—Notwithstanding that the *Journal* has a steady circulation of several thousand copies, the receipts during the last twelve months have been little more than a rateable proportion of a third of the current expenses. This is in part the history of this *Journal*; the broken promises of its 'patrons' have caused its discontinuance. Some atonement for past delays and disappointments will, it is hoped, be now made, by subscribers in arrears promptly paying their dues and saving the publisher any further trouble in the business.

SAMUEL C. ATKINSON.

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